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TECHNOLOGICAL REPORTS
ON
TRADE VARIETIES OF
INDIAN COTTONS,
1936

BY

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INTRODUCTION.

ONE of the main functions of the Technological Laboratory is to undertake spinning tests on Indian cottons. Upto 1929, these tests were mostly confined to samples supplied by cotton breeders and agricultural officers of the Provincial Agricultural Departments. These samples represented either new varieties which were under trial or cottons grown in connection with such field experiments as the effect of different amounts of irrigations, different rotation of crops, different dates of sowing, etc., etc. As most of the samples tested at the Laboratory for the Agricultural Departments are in the experimental stage, the results of the tests made on them are not published for general information, but are communicated only to the departments concerned. There was, however, a general feeling that the work of the Laboratory should be made more directly useful to the trade and the industry, and it was felt that this purpose could be achieved by carrying out spinning tests on such samples of representative trade varieties as form the bulk of the Indian cotton crop. In order to meet this general desire arrangements were made with the East India Cotton Association, Ltd., Bombay, for the supply of fair average quality of different trade varieties of Indian cotton on which spinning tests could be made at the Laboratory, so that the results of these tests could be broadcast for general information. These tests were first made on the 1929-30 crop, and have since been repeated on the same varieties without a break in the past seven seasons. The samples for these tests are selected by the Standards Committee of the East India Cotton Association, who also very kindly value them and give their opinion regarding their staple, class, regularity, strength, etc., etc. The tests on these samples are made with two objects. In the first place they place in the hands of the trade and the industry reliable information regarding the waste losses and the spinning performance of the chief representative types of Indian cotton. This information is available not only to merchants and spinners in India, but also to those in the foreign countries who import a considerable fraction of the Indian cotton crop. Thus, the consumers of Indian cottons, both in India and abroad, obtain reliable information regarding the spinning quality of the different styles of Indian cottons in each season. In the second place, as these tests are made year after year on samples of fair average quality selected by an expert and authoritative body like the Standards Committee of the East India Cotton Association, the results of these tests taken over a number of years are useful in showing whether any particular variety of cotton is maintaining its quality or showing signs of improvement or deterioration. If any particular variety is found, over a number of years, to show signs of steady deterioration, which is outside the seasonal fluctuation, then it is possible to undertake an investigation into the causes of this deterioration and to adopt the necessary remedial measures. It is clear that, in the absence of any reliable data obtained under definitely known and reproducible conditions on samples of fair average quality, it would not be possible to lay down definitely whether or not any particular type is showing signs of deterioration, and such may take place in a variety

without being detected for a number of years. The following is a list of cottons supplied by the East India Cotton Association, Bombay, on which tests have been made at the Laboratory :—

Cottons received from the East India Cotton Association :—

- | | |
|--------------------|-------------------|
| 1. C. P. No. 1 | 14. Kadi-Viramgam |
| 2. Berar | 15. Westerns |
| 3. Khandesh | 16. Farm Westerns |
| 4. Nanded | 17. Kumpta |
| 5. Latur | 18. Upland |
| 6. Muttia | 19. Bijapur |
| 7. Punjab-American | 20. Bagalkote |
| 8. Broach | 21. Cambodia |
| 9. Jagadia | 22. Tinnevely |
| 10. Surat | 23. Karunganni |
| 11. Navsari | 24. A. R. Kampala |
| 12. Dholeras | 25. A. R. Busoga |
| 13. Kalagin | 26. A. R. Jinja |

At the same time as the foregoing arrangement was made with the East India Cotton Association, Ltd., Bombay, it was also arranged with the Bombay Millowners' and the Ahmedabad Millowners' Associations, that some of their mill members would kindly supply to the Laboratory samples of early arrivals of different varieties of the Indian cotton crop. The object of making these tests was to place in the hands of the industry information regarding the waste losses and the spinning performance of different trade varieties in the early part of the season in order to enable the consumers to decide which of these cottons would be suitable for their mixings. These tests were begun in 1930-31, and have been continued upto the present season. In view of the fact, however, that sometimes a mill using a particular style of cotton in one season decided not to purchase the same style in the following season, a certain amount of discontinuity has occurred in some of these varieties. However, so far as possible, efforts have been made to obtain, in each season, samples of the same varieties so that the results of tests in the successive seasons may be comparable. As regards the valuation of these samples, this was kindly done by the Grader (Major Ellis Jones), upto 1931-32, but in the following seasons the mills supplying the samples were requested to furnish their own valuation reports. The following is a list of the cottons tested at the Laboratory under this arrangement with the Bombay and Ahmedabad Millowners' Associations :—

Cottons received from the Bombay Millowners' Association :—

- | | |
|----------------------|-----------------------|
| 1. Farm Westerns | 11. Westerns |
| 2. Bailhongal | 12. Miraj |
| 3. Broach | 13. Surat |
| 4. Karunganni | 14. Navsari |
| 5. Nandyal | 15. Tiruppur Cambodia |
| 6. Northern Cambodia | 16. Hubli Kumpta |
| 7. Bengals | 17. Hubli Upland |
| 8. Khandesh | 18. Kampala (African) |
| 9. Ujjain | 19. Busoga (African) |
| 10. Moglai | 20. Jinja (African) |

Cottons received from the Ahmedabad Millowners' Association :—

- | | |
|------------|---------|
| 1. Jagadia | 3. Kadi |
| 2. Bayla | |

The plan followed in presenting the results of tests on these cottons is very nearly the same as that adopted in the Technological Reports on Standard Indian Cottons. Each technological report gives the grader's valuation report, spinning master's report, and the table of spinning test results which show the waste losses, number of yarn breakages in the ring frame, the actual counts spun, the results of thelea test and the ballistic test, actual number of turns per inch, front roller and spindle speeds, drafts employed, estimate of yarn neppiness and yarn evenness and the physical conditions of temperature and humidity prevailing in the spinning room and the yarn testing room. There is, however, this difference between these reports and those on the Standard Indian Cottons that as fibre tests were not made on these trade varieties, these reports do not contain the fibre test results, nor any attempt has been made to summarise the results in the form of 'remarks.'

The supply of these samples together with the valuation reports has not been free from a certain amount of extra work on the part of those who have very kindly co-operated with me in these tests. My best thanks are therefore due to the members of the Standards Committee of the East India Cotton Association, Bombay, and its office-bearers and to the mills supplying the samples. My thanks are also due to Major Ellis Jones for valuing some of the samples, to Mr. R. P. Richardson for supervising the spinning tests and to Mr. V. Venkataraman, for assisting me in the compilation of the test result tables.

N. A.

November 1936.

1.—C. P. No. 1 COTTON.

These samples have been very kindly supplied by the East India Cotton Association, after inspection and approval by their Standards Committee, in accordance with an arrangement made with the Association to supply to the Technological Laboratory, for testing, samples of fair average cotton of the commercial crop.

Sample No.	Cotton.	Place.	Season.	Sample No.	Cotton.	Place.	Season.
664	C.P. No. 1 (Fine)	Wardha	1929-30.	1724	C.P. No. 1	Nagpur	1932-33.
665	C.P. No. 1 (Superfine)	Nagpur	1929-30.	2137	"	Panderkora	1933-34.
999	C.P. No. 1	Katol	1930-31.	2654	"	"	1934-35.
1336	"	Nagpur	1931-32.	3110	"	Nagpur	1935-36.

I.—SPINNING TESTS.

1. Treatment :—

(a) *Blow-Room*.—Upto 1934-35 (inclusive):—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).

1935-36 :—Hopper bale opener, Horizontal cleaner, Crighton (once), Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).

(b) *Card-room*.—Upto 1933-34 (inclusive):—Card, Drawing (2 heads), Shubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.

1934-35 and 1935-36 :—Same as above but spun from single hank roving on Ring Frame No. 3, which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) Cotton :—

	C. P. No. 1.							
	1929-30 (Fine)	1929-30. (Superfine)	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Colour	Creamy white.	Creamy to creamy white; bright.	White to creamy white; very bright.	Brightish to creamy white.	White to creamy white.	White; bright.	White to creamy white; brightish.	White to creamy white.
Cleanliness ..	Fairly clean; fairly bright.	Clean.	Fairly clean.	Slightly stained; fairly clean.	Fairly clean.	Clean.	Clean.	Clean.
Feel	Slightly harsh.	Typical harsh feel of its class.	Good.	Good.	Good and softish.	Rough.	Good.	Slightly rough.
Ginning and Neppiness.	Well-ginned.	Well-ginned.	Well-ginned.	Well-ginned.	Well-ginned.	Well-ginned.	Well-ginned.	Well-ginned.
Seeds	1.33 percent. unginned seeds.	0.3 per cent. unginned.	..	..	..	..	..	..
Card Sliver ..	..	..	Clean.	Clean.	Clean.	Clean.	Clean.	Clean.
Card Web .. ..	..	..	Good.	Good.	Fairly even and nep-free.	Even and nep-free.	Good.	Good.
Weight of 10 flat strips.	..	..	Very light; 12.3 grams.	15.8 grams.	16.2 grams.	15.9 grams.	16.3 grams.	12.2 grams.
Remarks .. ..	..	..	Fully-pressed.	..	..	..	..	..

(b) Yarn :—

	C. P. No. 1.							
	1929-30. (Fine)	1929-30 (Superfine)	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Cleanliness ..	Clean.	Clean.	Clean.	Clean.	Clean.	Clean.	Clean.	Clean.
Evenness	Fairly uneven.	Fairly even.	Fairly even.	Somewhat uneven.	Fairly even.	Somewhat uneven.	Somewhat uneven.	Even.
Neppiness	Very little nep.	Free of nep.	Practically free.	Practically free.	Free of nep.	Nep-free.	Free of nep.	Almost free of nep.
Slubbiness ..	Very little slub.	Free of slub.	..	Fairly slubby.	..	..	A little slubby.	..
Remarks .. ..	..	..	..	..	..	..	..	..

3. *Spinning Test Details and Results*.—See Table 1 on page 3.

1-35.	1935-30.
G. Oomra Contract March 1935	Fine M. G. Oomra Hedge Contract No. 3, March 1936 delivery.
fine.	Superfine to Extra Superfine.
te.	Creamish white.
	5/8.
	Fair.
	Regular.
	Rs. 22 on.
G. Oomra Contract March 1935 Rs. 226.	Fine M. G. Oomra Hedge Contract No. 3, March 1936 delivery Rs. 170.
ry 1935.	2nd March 1936.

TECHNOLOGICAL REPORTS

ON

COTTONS SUPPLIED BY

THE EAST INDIA COTTON ASSOCIATION LTD., BOMBAY.

These samples are of fair average quality of the representative trade varieties which form the bulk of the Indian Cotton crop. The samples are selected by the Standards Committee of the East India Cotton Association, who have also very kindly furnished the valuation reports regarding their staple length, class, regularity, strength, etc.

	1930-30 (Fine).
Contract valued under ..	.. Fine C.P. No. 1.
Class ..	.. About fine.
Colour ..	.. Very dull.
Staple Length ..	.. 5/8.
" Strength ..	.. Fair.
Regularity ..	.. Fairly regular.
Value above or below Contract rate	Rs. 2 off Fine No. 1.
Basis ..	.. Rs. 19 on Fine No. 3.
Date of Valuation ..	.. 18th January 19
Remarks ..	..

1.—C. P. No. 1¹/₂ COTTON.

These samples have been very kindly supplied by the East India Cotton Association, after inspection and approval by their Standards Committee, in accordance with an arrangement made with the Association to supply to the Technological Laboratory, for testing, samples of fair average cotton of the commercial crop.

Sample No.	Cotton.	Place.	Season.	Sample No.	Cotton.	Place.	Season.
664	C.P. No. 1 (Fine)	Wardha	1929-30.	1724	C.P. No. 1	Nagpur	1932-33.
665	C.P. No. 1 (Superfine)	Nagpur	1929-30.	2137	"	Pandarkora	1933-34.
999	C.P. No. 1	Katol	1930-31.	2054	"	"	1934-35.
1336	"	Nagpur	1931-32.	3110	"	Nagpur	1935-36.

I.—SPINNING TESTS.

1. Treatment :—

(a) *Blow-Room*.—Upto 1934-35 (inclusive):—Poreupine, Crighton (twice), Hopper, Scutcher (3 times).

1935-36 :—Hopper bale opener, Horizontal cleaner, Crighton (once), Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).

(b) *Card-room*.—Upto 1933-34 (inclusive):—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.

1934-35 and 1935-36 :—Same as above but spun from single hank roving on Ring Frame No. 3, which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) Cotton :—

	C. P. No. 1.							
	1929-30 (Fine)	1929-30. (Superfine)	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Colour ..	Creamy white.	Creamy to creamy white; bright.	White to creamy white; very bright.	Brightish creamy white.	White to creamy white.	White; bright.	White to creamy white; brightish.	White to creamy white.
Cleanliness ..	Fairly clean; fairly bright.	Clean.	Fairly clean.	Slightly stained; fairly clean.	Fairly clean.	Clean.	Clean.	Clean.
Feel ..	Slightly harsh.	Typical harsh feel of its class.	Good.	Good.	Good and softish.	Rough.	Good.	Slightly rough.
Gloning and Neppiness.	Well-ginned.	Well-ginned.	Well-ginned.	Well-ginned.	Well-ginned.	Well-ginned.	Well-ginned.	Well-ginned.
Seeds ..	1.33 percent. un- ginned seeds.	0.3 per cent. unginned.	..	..	..	..	..	..
Card Sliver	..	..	Clean.	Clean.	Clean.	Clean.	Clean.	Clean.
Card Web ..	..	..	Good.	Good.	Fairly even and nep- free.	Even and nep-free.	Good.	Good.
Weight of 10 flat strips.	..	..	Very tight; 12.3 grams.	15.8 grams.	16.2 grams.	15.9 grams.	16.3 grams.	15.2 grams.
Remarks ..	..	..	Fully pressed.	..	..	..	..	..

(b) Yarn :—

	C. P. No. 1.							
	1929-30. (Fine)	1929-30. (Superfine)	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Cleanliness ..	Clean.	Clean.	Clean.	Clean.	Clean.	Clean.	Clean.	Clean.
Evenness ..	Fairly uneven.	Fairly even.	Fairly even.	Somewhat uneven.	Fairly even.	Somewhat uneven.	Somewhat uneven.	Even.
Neppiness ..	Very little nep.	Free of nep.	Practically free.	Practically free.	Free of nep.	Nep-free.	Free of nep.	Almost free of nep.
Business marks ..	Very little slub.	Free of slub.	..	Fairly slubby.	..	..	A little slubby.	..

3. Spinning Test Details and Results.—See Table 1 on page 3.

Table 1.—SPINNING TEST RESULTS FOR C. P. No. 1 COTTON.

Sample No.	Cotton.	Season.	Date of Spinning.	Counts Nominal.	Weight of Sample, lbs.	WASTE PERCENTAGES.						RING FRAME PARTICULARS.*										YARN TEST RESULTS.										TEMPERATURE RATHER (°F.).	RELATIVE HUMIDITY (%).																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
						Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss.	Yarn Breakages per 100 spindles per hour.	Front Roller Speed, R. P. M.	Spiral Speed, R. P. M.	Draft.	Turns per Inch.	LEA.			BALANCE.			Evenness Class.			Neeps per yard.	Turns per Inch Actual.	Work of Rupture (inch-lb.).	Count-Work Product.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
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644	C.P. No. 1 (Fine)	1029-30	4-2-30	10A	10	8.0	7.8	0.5	15.0	110	172	..	5.10	12.03	10.1	46.8	473	10.2	155.8	1589	0	1.5	12.1	82	67	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	

* Ring frame front roller diameter—7/8". Diameter of rings—1.05".

† To be noted that the total loss is for a small sample weighing 10 lbs.; for bulk sample spun under mill conditions it would be less than shown here.

2.—BERAR COTTON.

These samples have been very kindly supplied by the East India Cotton Association after inspection and approval by their Standards Committee in accordance with an arrangement made with the Association to supply to the Technological Laboratory, for testing, samples of fair average cotton of the commercial crop.

Sample No.	Cotton.	Place.	Season.	Sample No.	Cotton.	Place.	Season.
670.	Berar	(Fine)					
		Karanja	1929-30.	1723	Berar	Amraoti	1932-33.
663	"	(Superfine)		2136	"	Shegaon	1933-34.
		Malkapur	1929-30.				
1004	"	Amraoti	1930-31.	2656	"	Akote	1934-35.
1335	"	Murtizapur	1931-32.	3264	"	Akola	1935-36.

I. SPINNING TESTS.

1. Treatment :—

(a) *Blow-room*—Upto 1934-35 (inclusive):—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).

1935-36 :—Hopper bale opener, Horizontal cleaner, Crighton (once), Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).

(b) *Card-room*—Upto 1933-34 (inclusive):—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.

1934-35 and 1935-36 :—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) Cotton :—

	BERAR.							
	1929-30 (Fine).	1929-30 (Superfine).	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Colour ..	Cream-white	Creamy to creamy-white.	White to creamy-white; bright.	Creamy-white ..	White to creamy-white.	White to bright.	White to creamy-white.	Creamy-white.
Cleanliness ..	Fairly leafy.	Fairly leafy.	Trifle stained; a little leafy.	Somewhat stained; leafy.	Leafy.	Somewhat leafy.	Leafy.	Slightly stained; leafy.
Fool ..	Harsh.	On the rough side.	Slightly harsh.	Roughish.	Good	Good-bodied.	Roughish.	Good.
Ginning and Noppiness ..	Well-ginned.	Well-ginned.	Well-ginned.	Well-ginned.	Well-ginned.	Well-ginned.	Well-ginned.	A little knotted.
Seeds ..	1.25 per cent. unginned.	1.75 per cent. unginned.	0.75 per cent. unginned.	Well-ginned.	A few seeds.	Well-ginned.	Many unginned seeds.	..
Card sliver ..	..	..	..	Fairly clean.	Clean	Clean	Clean	Almost clean.
Card web ..	..	..	..	Good	Fairly even and free.	Even and free.	Good	A little nappy and cloudy.
Weight of 10 flat strips ..	..	..	..	10.4 grams	10.0 grams	14.6 grams	10.5 grams	23.3 grams.
Remarks ..	Regularity in staple length and strength of staple are both fair.	Excessive yarn break; spinning speed lowered.	..	..	..	..	..	..

(b). Yarn :—

	BERAR.							
	1929-30 (Fine).	1929-30 (Superfine).	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Cleanliness ..	Clean	Clean	Clean	Clean	Clean	Clean	Clean	Almost clean.
Evenness ..	Fairly even	Fairly uneven	Fairly even	Somewhat uneven.	Fairly even	Fairly uneven	Somewhat uneven.	Even.
Noppiness ..	nappy	Almost free.	Free	Practically free.	Practically free.	Nep-free.	Free of nep.	Nep-free.
Stiffness ..	Slubby	Trifle slubby	Somewhat slubby.	Fairly slubby.	..	..	A little slubby	..
..

Spinning Test Details and Results.—See Table 2 on page 6.

II. REPORT OF THE STANDARDS COMMITTEE FOR BERAR COTTON.

BERAR.

	1929-30 (Fine).	1929-30 (Superfine).	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Contract valued under ..	Fine Berar.	Fine Berar.	Fine Omra No. 3.	F. G. M. G. Broach No. 2.	F. M. G. Omra Hedge Contract No. 3.	F. M. G. Omra Hedge (Berar) No. 3.	Fine M. G. Omra Hedge Contract No. 3, March 1935, delivery.	Fine M. G. Omra Hedge Contract No. 3, July 1936, delivery.
Class ..	Superfine.	Superfine to extra superfine.	Fine.	Bully good to fine.	Superfine.	Superfine.	Extra superfine.	Fine.
Colour ..	White.	Normal.	Creamy-white.	Bluish white with yellow stains.	White.	White.	White.	Greyish white.
Staple length ..	5/8".	5/8".	1 1/2".	5/8".	5/8".	5/8".	5/8".	5/8".
" strength ..	Strong.	Weakish.	Weak.	Good.	Fair.	Fair.	Fair.	Good.
Regularity ..	Irregular.	Irregular.	Irregular.	Regular.	Regular.	Regular.	Regular.	Regular.
Value above or below contract rate.	Ra. 8 on.	Ra. 5 on Fine Berar.	No. 1 on.	Ra. 14 off.	Ra. 5 on.	Ra. 3 on.	Ra. 7-8 on.	Par.
Basis ..	Par Fine Omra No. 3.	Par Fine Omra No. 3.	Ra. 188.	Ra. 175.	Settlement rate of F. M. G. Omra Hedge Contract No. 3, March 1933, delivery Ra. 197.	F. M. G. Omra Hedge (Berar) No. 3, March 1934, delivery Ra. 190.	Fine M. G. Omra Hedge Contract No. 3, March 1935, delivery Ra. 226.	Fine M. G. Omra Hedge Contract No. 3, July 1936, delivery Ra. 208.
Date of Valuation ..	25-1-30.	18-1-30.	5-3-31.	9-5-32.	25-3-33.	7-2-34.	30-1-35.	24-4-36.
Remarks ..	..	..	..	Black test.	..	..	..	..

Table 2.—SPINNING TEST RESULTS FOR BERAR COTTON.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
Sample No.	Cotton.	Season.	Date of Spinning.	Counts Nominal.	Weight of Sample lbs.	WASTE PERCENTAGES.				RING FRAME PARTICULARS.*				YARN TEST RESULTS.								TEMPERATURE (°F)		RELATIVE HUMIDITY (%)		
						Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss.†	Yarn Breakages per 100 spindles per hour.	Front Roller Speed, R.P.M.	Spindle Speed, R.P.M.	Draft.	Turns per inch.	LZL.			DUALISTO.			Twines Class.	Steps per yard.	Turns per inch Actual.	Spiraling Loom.	Spiraling Loom.	Testing Loom.
															Counts Actual.	Strength (lbs.)	Count-Strength Product.	Counts Actual.	Work of Rupture (inch-lb.)	Count-Work Product.						
670	Fine	1929-30	8-2-30	10A	10	11.1	9.0	0.5	19.5	110	175	..	5.21	12.63	9.0	49.5	490	9.9	108.8	1671	4	2.0	12.0	60	65	60
670	Berar	1929-30	8-2-30	10B		..	..	..	..	113	194	..	5.22	14.29	9.9	83.5	827	10.1	181.0	1858	5	2.2	13.6	63	64	63
663	Superfine Berar	1929-30	4-2-30	10A	9	12.3	0.4	0.5	20.0	80	172	..	5.21	12.63	10.3	41.8	461	10.3	145.4	1477	6	1.5	12.0	52	67	52
663	"	1929-30	4-2-30	10B		..	..	..	..	30	183	..	5.21	14.29	10.1	79.0	804	10.4	173.0	1799	6	1.8	13.6	51	65	51
1001	Berar	1930-31	16-3-31	10A	10	9.8	9.6	0.8	19.1	200	180	6350	5.00	12.63	10.2	31.4	320	10.3	134.8	1263	5	1.0	12.0	66	65	66
1004	"	1930-31	17-3-31	10B		..	..	..	..	100	188	7250	5.10	14.29	10.2	59.0	602	10.2	166.0	1697	5	2.0	13.7	69	66	69
1335	Berar	1931-32	13-5-32	10A	10	8.0	10.2	0.6	17.9	145	176	5000	5.43	12.63	10.2	34.0	317	10.2	176.4	1769	5	0.5	12.2	68	69	68
1335	"	1931-32	14-5-32	10B		..	..	..	..	173	182	7900	5.43	14.29	9.8	73.5	720	10.2	105.2	1091	4	1.0	13.8	65	67	65
1723	Berar	1932-33	1-4-33	10A	10	12.0	11.9	0.6	22.0	125	171	5850	5.70	12.63	9.8	49.5	485	9.8	189.0	1940	4	1.2	12.3	70	72	70
1723	"	1932-33	1-4-33	10B		..	..	..	..	191	191	7700	5.29	14.29	0.8	84.5	828	0.9	203.4	2063	4	1.0	14.0	68	66	68
2136	Berar	1933-34	14-2-34	10A	10	8.0	12.3	0.4	19.8	55	176	6000	5.47	12.63	10.1	63.0	630	10.3	210.4	2167	4	1.0	12.2	72	66	72
2136	"	1933-34	14-2-34	10B		..	..	..	..	44	196	7650	5.47	14.29	9.8	111.7	1065	10.0	230.2	2392	5	0.8	13.0	72	70	72
2656	Berar	1934-35	8-2-35	10A	10	10.2	10.7	0.3	20.0	55	180	6250	5.12	12.63	10.0	49.8	468	10.1	161.4	1663	5	1.2	12.2	72	69	72
2656	"	1934-35	8-2-35	10B		..	..	..	..	29	194	7500	5.25	14.29	10.2	82.8	843	10.0	216.0	2160	5	1.0	13.8	74	68	74
3264	Berar	1935-36	6-7-36	10A	10	9.5	11.8	0.2	20.4	18	193	7000	5.34	12.63	10.1	62.8	634	10.2	221.6	2260	3	1.0	12.0	70	73	70
3264	"	1935-36	7-7-36	10B		..	..	..	..	0	200	7559	5.34	14.29	10.1	106.6	1077	10.1	227.6	2602	3	0.5	13.6	73	75	73

* The ring frame front roller diameter—7/8". Diameter of rings—1 5/8".

† It is to be noted that the total loss is for a small sample weighing 10 lbs.; for bulk sample spun under mill conditions it would be less than shown here.

3.—KHANDESH COTTON.

These samples have been very kindly supplied by the East India Cotton Association, after inspection and approval by their Standards Committee, in accordance with an arrangement made with the Association to supply to the Technological Laboratory, for testing, samples of fair average cotton of the commercial crop.

Sample No.	Cotton.	Place.	Season.	Sample No.	Cotton.	Place.	Season.
662	Khandesh (Superfine)	Dhulia.	1929-30.	1722	Khandesh	Dhulia.	1932-33.
661	" (Fine)	Amalner.	1929-30.	2138	"	"	1933-34.
1001	"	Dhulia.	1930-31.	2655	"	"	1934-35.
1432	"	Chopda.	1931-32.	3265	"	Amalner.	1935-36.

I. SPINNING TESTS.

1. Treatment :—

(a) *Blow-room*.—Upto 1934-35 :—Porcupine, Crighton (twice), Hopper, Scutcher (3 times). 1935-36:—Hopper bale opener, Horizontal cleaner, Crighton, Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).

(b) *Card-room*.—Upto 1933-34 :—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1. 1934-35 and 1935-36:—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) Cotton :—

	KHANDESH.							
	1929-30. (Superfine).	1929-30. (Fine.)	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Colour ..	.. Creamy white; dull.	.. Creamy white; dull.	.. White to creamy white; fairly bright.	.. Dull creamy.	.. White to creamy white.	.. White to creamy white.	.. White to creamy white.	.. Creamy-white to creamy.
Cleanliness ..	.. Fairly leafy; a little stained.	.. Fairly leafy (very fine leaf). A trifle stained.	.. A little leafy; occasional spot of stain.	.. Leafy	.. Leafy	.. Leafy; occasionally stained.	.. Leafy	.. Leafy; stained.
Feel ..	.. Rough	.. Roughish	.. Good	..	.. Good softish.	.. Good	.. Slightly rough.	.. Good.
Ginning and neppiness ..	.. Well ginned	.. A fair amount of sand.	.. Well ginned	.. Fairly well ginned.	.. Well ginned	.. Well ginned	.. Well ginned	.. So somewhat knotted.
Seeds ..	.. 0.8 % unginned.	.. 1 % unginned seeds.	..	.. 1.4 % unginned.	..	..	..	.. Few unginned seeds.
Card sliver ..	.. Very clean	..	.. Clean	.. Clean	.. Clean	.. Clean	.. Clean	.. Little leafy.
Card web ..	.. Clear	.. Clear	.. First class	.. Fairly good.	.. Even and nepp-free.	.. Even and nepp-free.	.. Good	.. Trifle neppy and cloudy.
Weight of ten flat strips ..	15.1 grams.	15.3 grams.	10.1 grams; very light.	15.8 grams	14.8 grams	15.2 grams	17.1 grams	24.5 grams.
Remarks ..	.. Staple even and strong.	.. Staple short but regular in length and fairly strong.	..	..	..	..	..	.. A wasty sample.

(b) Yarn :—

	KHANDESH.							
	1929-30. (Superfine).	1929-30. (Fine.)	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Cleanliness ..	.. Clean	.. Clean	.. Clean	.. Clean	.. Clean	.. Almost clean.	.. Clean	.. A little leafy.
Evenness ..	.. Fairly even	.. Fairly even	.. Fairly even	.. Even	.. Even	.. Fairly uneven.	.. Even in the	.. Fairly even
Neppiness ..	.. A little neppy	.. A little neppy	.. Fairly nepp-free	.. Practically nepp-free.	.. Nepp-free	.. Nepp-free	..	..
Slubbiness ..	.. Somewhat slubby.	.. Fairly slubby.	..	..	..	..	..	..
Remarks ..	.. Slubbiness more prominent than neppiness.	..	..	..	..	..	.. A little slubby.	..

3. *Spinning Test Details and Results*.—See Table 3 on page 9.

II. REPORT OF THE STANDARDS COMMITTEE FOR KHANDESH COTTON.

KHANDESH									
	1929-30. (Superfine.)	1929-30. (Fine.)	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.	
Contract valued under ..	Fine Khandesh.	Fine Khandesh.	Fine Oomra No. 3.	F. G. M. G. Brooch No. 2.	Fine M. G. Oomra Hedge No. 3.	Fine M. G. Oomra (Barn) H.C. No. 3.	Fine M. G. Oomra Hedge Contract No. 3, March 1935 delivery.	Fine M. G. Oomra Hedge Contract No. 3, July 1936 delivery.	
Class ..	.. Strict Superfine.	Fine to Superfine.	Superfine.	Fully good.	Superfine.	Fine.	Barely fine.	Fully good.	
Colour ..	.. Average to good.	Dull to average.	Dull white.	Brownish with stains.	White.	White.	Whitish.	Dull white.	
Staple Length ..	.. 1 1/2"	1 1/2"	5/8"	9/16"	5/8"	1 1/2"	5/8"	5/8"	
Staple Strength ..	.. Fair to good.	Fair.	Fair.	Very weak.	Fair.	Fair.	Fair.	Fair.	
Regularity ..	.. Good.	Normal.	Regular.	Irregular.	Regular.	Regular.	Fair.	Regular.	
Valued above or below contract rate.	Rs. 5 on Fine Khandesh.	Rs. 3 on Fine Khandesh.	Rs. 2 on.	Rs. 15 off.	Rs. 2 on.	Rs. 4 off.	Par.	Rs. 10 off.	
Basis ..	.. Rs. 7 off Fine Oomra No. 3.	Rs. 7 off Fine Oomra No. 3.	Rs. 138.	Rs. 219.	Settlement rate of Fine M. G. Oomra Hedge Contract No. 3, March 1933 delivery, Rs. 167.	Fine M. G. Oomra (Barn) H.C. No. 3, March 1934 delivery, Rs. 190.	Fine M. G. Oomra Hedge Contract No. 3, March 1935 delivery, Rs. 226.	Fine M. G. Oomra H. C. No. 3, July 1936 delivery, Rs. 208.	
Date of Valuation ..	.. 18-1-30.	18-1-30.	5-3-31.	17-8-32.	25-3-33.	7-2-34.	30-1-35.	24-6-36.	
Remarks ..	..	..	Slightly black leafy.	Poor style cotton being end of season.	..	..	..	..

Table 3.—SPINNING TEST RESULTS FOR KHANDESH COTTON.

Sample No.	Season.	Ditto of Spinning.	Counts Nominal.	Weight of Sample, lbs.	WASTE PERCENTAGES.				RING FLAME PATENTCOTTON.*				YARN TEST RESULTS.										TEMPERATURE AT YARN TEST RESULTS.		RELATIVE HUMIDITY (%).
					Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss.†	Yarn Breakages per 100 spindles	Front Roller Speed, R.P.M.	Spiral Speed, R.P.M.	Draft.	Turns per Inch.	LEA.		DALLASTON			Neeps per yard.	Turns per Inch Actual.	Spinning Room.	Spinning Room.			
														Counts Actual.	Strength (lbs.)	Count - Strength	Counts Actual.	Work of Rupture (inch-lb.)					Count Work Product.		
062	Superfine.	3-2-30	10A	10	11.2	7.3	0.3	13.4	110	190	..	5.87	12.33	10.2	56.6	577	10.5	162.2	1598	6	2.0	12.1	81	03	67
662		1-2-30	10B		..	..	..	..	50	193	..	5.97	14.20	10.1	05.1	000	10.3	167.4	2033	5	1.8	13.7	81	02	07
	Fine.																								
901		3-2-30	10A	10	11.0	8.0	0.3	19.3	100	190	..	5.74	12.33	10.1	55.4	530	10.4	150.0	1500	5	2.2	12.1	81	03	66
001		3-2-30	10B		..	..	..	..	20	103	..	5.74	14.20	10.1	01.9	028	10.3	187.8	1034	5	1.8	13.5	81	02	65
1001		13-3-31	10A	10	8.7	7.4	0.6	10.0	20	105	6350	5.25	12.03	10.1	77.0	764	10.3	200.2	2165	4	2.5	11.3	83	70	07
1001		13-3-31	14A		..	..	..	..	20	152	0250	0.84	14.08	13.8	44.3	011	14.0	127.0	1780	5	3.0	14.2	82	07	03
1001		13-3-31	14B		..	..	..	..	100	190	3750	6.97	10.35	14.7	55.9	822	14.3	140.8	2013	0	3.2	16.2	82	09	00
1432		25-8-32	16A	0	10.3	11.3	0.7	26.3	47	190	8550	5.11	15.07	15.7	80.3	1201	15.4	141.8	2184	3	1.0	15.2	89	72	70
1432		25-8-32	20		..	..	..	..	114	185	9000	5.50	17.08	10.5	59.0	1156	10.0	106.4	2060	3	1.2	17.2	00	67	71
1722		31-3-33	12A	10	11.1	0.2	0.0	10.3	124	190	7300	5.21	13.32	12.0	60.7	890	11.9	102.0	2285	3	0.5	13.4	85	00	71
1722		31-3-33	12B		..	..	..	..	160	198	7650	5.21	14.23	12.0	82.0	005	11.8	106.8	2292	3	0.8	14.2	86	05	70
1722		31-3-33	10B		..	..	..	..	164	174	8700	5.78	17.38	16.3	53.3	890	16.1	143.0	2312	4	0.8	17.1	87	05	70
2138		14-2-34	10A	10	11.1	11.0	0.4	21.7	27	202	7000	5.71	12.33	9.0	100.6	1053	10.1	233.6	2250	4	1.0	12.2	82	70	72
2138		15-2-34	12B		..	..	..	..	15	164	7650	5.44	14.68	12.6	03.7	1181	11.5	200.4	2274	5	1.0	14.2	81	08	73
2138		15-2-34	14D		..	..	..	..	65	186	8500	6.38	16.85	13.8	84.0	1172	13.8	171.0	2306	0	1.2	16.4	82	07	72
355		9-2-35	10A	10	11.1	10.7	0.4	20.0	45	196	0650	5.37	12.33	10.0	87.1	871	0.0	210.0	2174	4	1.5	12.0	80	03	74
2055		11-2-35	12B		..	..	..	..	30	100	7000	5.38	14.08	12.5	69.6	870	12.3	184.4	2268	5	1.2	13.8	81	70	70
2055		11-2-35	14B		..	..	..	..	05	182	8250	0.13	10.35	14.2	08.7	070	14.2	155.0	2210	5	1.2	16.0	83	00	08
3205		6-7-30	10A	10	11.2	13.1	0.4	23.1	18	196	0950	5.23	12.33	10.0	67.0	670	0.0	235.2	2328	4	1.0	12.3	87	72	70
3265		6-7-30	12A		..	..	..	..	15	198	8000	5.31	14.68	11.0	63.9	820	11.8	209.2	2197	5	1.5	14.2	87	71	70
3266		14-7-30	12B		..	..	..	..	58	107	8750	5.42	15.53	12.0	81.8	082	12.2	106.4	2306	4	0.8	15.3	87	71	72
38		7-7-30	14B		..	..	..	..	80	188	8300	6.22	10.35	14.0	04.8	004	14.1	174.4	2459	5	1.2	10.4	86	74	71

* Diameter of ring frame front roller—7/8". Diameter of rings—1 5/16".
† It is to be noted that the total loss is for a small sample spun under mill conditions it would be less than shown here.

4.—NANDED COTTON.

These samples have been very kindly supplied by the East India Cotton Association, after inspection and approval by their Standards Committee, in accordance with an arrangement made with the Association to supply to the Technological Laboratory, for testing, samples of fair average cotton of the commercial crop.

Sample No.	Cotton.	Season.	Sample No.	Cotton.	Season.
669	Nanded.	1929-30.	2195	Nanded.	1933-34.
1003	"	1930-31.	2712	"	1934-35.
1338	"	1931-32.	3111	"	1935-36.
1725	"	1932-33.			

I. SPINNING TESTS.

1. Treatment :—

(a) *Blow-room*.—Upto 1934-35 (inclusive):—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).

1935-36 :—Hopper bale opener, Horizontal cleaner, Crighton (once), Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).

(b) *Card-room*.—Upto 1933-34 (inclusive):—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.

1934-35 and 1935-36 :—Same as above but spun from single hank roving on Ring Frame No. 3 which, is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) Cotton :—

	NANDED.						
	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Colour	Creamy-white ; brightish.	White to Creamy-white.	Creamy-white.	Creamy-white ; dull.	Creamy-white.	Creamy-white.	White.
Cleanliness	Leafy ; a trifle stained.	Leafy ; some what stained.	Leafy ; some what stained.	Leafy	Leafy ; a little stained.	Leafy (very fine leaf).	Leafy.
Feel	Good-bodied ..	..	..	Soft	Good	Good	Good.
Ginning and Neppiness ..	Fairly well-ginned.	Well-ginned ..	..	Well-ginned ..	Well-ginned ..	Some what knotted.	Well-ginned.
Seeds	1.4% ..	1.25% ..	Some out seed.	0.94% ginned and unginned	..	..	Contains a few full clean seeds.
Card Sliver .. ..	..	Clean ..	A little leafy ..	Almost clean ..	Clean	Slightly leafy.	A little leafy.
Card Web	A trifle nappy.	Very good ..	Good	Nep-free and even.	Even	A little nappy.	Good.
Weight of ten flat strips ..	17.0 grams ..	12.3 grams ..	17.8 grams ..	17.4 grams ..	19.4 grams ..	24.6 grams ..	14.3 grams.
Remarks	Staple even and fairly strong.	..	..	..	..	..	..

(b) Yarn :—

	NANDED.						
	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Cleanliness	Clean	Clean	A trifle leafy ..	Almost clean ..	A little leafy ..	Fairly leafy ..	Almost clean.
Evenness	Even	Even in lower count.	Even	Even	Even in the two lower counts.	Even	Fairly even.
Neppiness	A trifle nappy.	A little nappy	Almost free of nep.	Practically free of nep.	Some what neppy.	Nappy	A little neppy.
Slubbiness .. ..	..	Higher counts a little slubby.	..	..	..	A little slubby.	..
..

3. *Spinning Test Details and Results* :—See Table 4 on page 12.

II. REPORT OF THE STANDARDS COMMITTEE FOR NANDED.

NANDED.								
	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.	
Contract valued under	F. G. Broach No. 2	F. G. Broach No. 2	F. G. M. G. Broach No. 2	F. G. M. G. Broach Hedge Contract No. 2	F. G. M. G. Broach Hedge Contract No. 2	F. G. M. G. Broach Hedge Contract No. 2	F. G. M. G. Broach Hedge Contract No. 2	
Class	Fully good to fine	Fully good	Fine	Fine	Fully good	Fine	Fine	
Colour	A little dull	Greyish	Considerably Bluish White and stains.	Bluish White	Greyish white	Greyish white	Dull whitish.	
Staple Length	15/16 inch	5/8 inch	3/4 inch	7/8 inch	Full 7/8 inch	7/8 inch	7/8 inch.	
Staple Strength	Very strong	Fair	Fair	Good	Good	Good	Fair to good.	
Regularity	Regular	Irregular	Irregular	A bit irregular	Regular	Irregular	Irregular.	
Value above or below contract rate	Rs. 40 on F. G. Broach April/May	Rs. 31 off	Rs. 15 on	Rs. 15 on	Rs. 25 on	Rs. 50 on	Rs. 25 on.	
Basis	....	Rs. 222	Rs. 175	Settlement rate of F. G. M. G. Broach Hedge Contract No. 2	F. G. M. G. Broach Hedge Contract No. 2	F. G. M. G. Broach Hedge Contract No. 2	F. G. M. G. Broach Hedge Contract No. 2
Date of Valuation	28-1-30	5-3-31	9-5-32	25-3-33	15-3-34	25-3-35	2-3-36	
Remarks	Not so silky or waxy as F. G. M. G. Latur.	Black leaf	....	....	....	....	....

Table 4.—SPINNING TEST RESULTS FOR NANNED COTTON.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466	467	468	469	470	471	472	473	474	475	476	477	478	479	480	481	482	483	484	485	486	487	488	489	490	491	492	493	494	495	496	497	498	499	500	501	502	503	504	505	506	507	508	509	510	511	512	513	514	515	516	517	518	519	520	521	522	523	524	525	526	527	528	529	530	531	532	533	534	535	536	537	538	539	540	541	542	543	544	545	546	547	548	549	550	551	552	553	554	555	556	557	558	559	560	561	562	563	564	565	566	567	568	569	570	571	572	573	574	575	576	577	578	579	580	581	582	583	584	585	586	587	588	589	590	591	592	593	594	595	596	597	598	599	600	601	602	603	604	605	606	607	608	609	610	611	612	613	614	615	616	617	618	619	620	621	622	623	624	625	626	627	628	629	630	631	632	633	634	635	636	637	638	639	640	641	642	643	644	645	646	647	648	649	650	651	652	653	654	655	656	657	658	659	660	661	662	663	664	665	666	667	668	669	670	671	672	673	674	675	676	677	678	679	680	681	682	683	684	685	686	687	688	689	690	691	692	693	694	695	696	697	698	699	700	701	702	703	704	705	706	707	708	709	710	711	712	713	714	715	716	717	718	719	720	721	722	723	724	725	726	727	728	729	730	731	732	733	734	735	736	737	738	739	740	741	742	743	744	745	746	747	748	749	750	751	752	753	754	755	756	757	758	759	760	761	762	763	764	765	766	767	768	769	770	771	772	773	774	775	776	777	778	779	780	781	782	783	784	785	786	787	788	789	790	791	792	793	794	795	796	797	798	799	800	801	802	803	804	805	806	807	808	809	810	811	812	813	814	815	816	817	818	819	820	821	822	823	824	825	826	827	828	829	830	831	832	833	834	835	836	837	838	839	840	841	842	843	844	845	846	847	848	849	850	851	852	853	854	855	856	857	858	859	860	861	862	863	864	865	866	867	868	869	870	871	872	873	874	875	876	877	878	879	880	881	882	883	884	885	886	887	888	889	890	891	892	893	894	895	896	897	898	899	900	901	902	903	904	905	906	907	908	909	910	911	912	913	914	915	916	917	918	919	920	921	922	923	924	925	926	927	928	929	930	931	932	933	934	935	936	937	938	939	940	941	942	943	944	945	946	947	948	949	950	951	952	953	954	955	956	957	958	959	960	961	962	963	964	965	966	967	968	969	970	971	972	973	974	975	976	977	978	979	980	981	982	983	984	985	986	987	988	989	990	991	992	993	994	995	996	997	998	999	1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011	1012	1013	1014	1015	1016	1017	1018	1019	1020	1021	1022	1023	1024	1025	1026	1027	1028	1029	1030	1031	1032	1033	1034	1035	1036	1037	1038	1039	1040	1041	1042	1043	1044	1045	1046	1047	1048	1049	1050	1051	1052	1053	1054	1055	1056	1057	1058	1059	1060	1061	1062	1063	1064	1065	1066	1067	1068	1069	1070	1071	1072	1073	1074	1075	1076	1077	1078	1079	1080	1081	1082	1083	1084	1085	1086	1087	1088	1089	1090	1091	1092	1093	1094	1095	1096	1097	1098	1099	1100	1101	1102	1103	1104	1105	1106	1107	1108	1109	1110	1111	1112	1113	1114	1115	1116	1117	1118	1119	1120	1121	1122	1123	1124	1125	1126	1127	1128	1129	1130	1131	1132	1133	1134	1135	1136	1137	1138	1139	1140	1141	1142	1143	1144	1145	1146	1147	1148	1149	1150	1151	1152	1153	1154	1155	1156	1157	1158	1159	1160	1161	1162	1163	1164	1165	1166	1167	1168	1169	1170	1171	1172	1173	1174	1175	1176	1177	1178	1179	1180	1181	1182	1183	1184	1185	1186	1187	1188	1189	1190	1191	1192	1193	1194	1195	1196	1197	1198	1199	1200	1201	1202	1203	1204	1205	1206	1207	1208	1209	1210	1211	1212	1213	1214	1215	1216	1217	1218	1219	1220	1221	12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* Diameter of ring frame front roller—1½ inch. Diameter of rings—1½ inch.

† It is to be noted that the total loss is for a small sample weighing 10 lbs.; for bulk sample spun under mill conditions it would be less than shown here.

5.—LATUR COTTON.

These samples have been very kindly supplied by the East India Cotton Association, after inspection and approval by their Standards Committee, in accordance with an arrangement made with the Association to supply to the Technological Laboratory, for testing, samples of fair average cotton of the commercial crop.

Sample No.	Cotton.	Season.	Sample No.	Cotton.	Season.
668	Latur	1929-30.	2194	Latur	1933-34.
1002	"	1930-31.	2713	"	1934-35.
1339	"	1931-32.	3112	"	1935-36.
1726	"	1932-33.			

I. SPINNING TESTS.

1. Treatment :—

(a) *Blow-room*.—Upto 1934-35 (inclusive):—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).

1935-36 :—Hopper bale opener, Horizontal cleaner, Crighton (once) Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).

(b) *Card-room*.—Upto 1933-34 (inclusive):—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.

1934-35 and 1935-36 :—Same as above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) *Cotton* :—

		LATUR.						
		1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Colour .. ..	..	Creamy-white ; bright.	Creamy-white ..	Creamy	Dullish white to creamy-white.	Creamy-white ..	White to creamy-white ; brightish.	White.
Cleanliness .. ..	..	Leafy	Leafy ; stained.	Very leafy (large size leaf) ; slightly stained.	Very leafy ..	Leafy ; a little stained.	Leafy	Very leafy ; a little stained.
Feel .. ..	..	Good soft ..	Soft silky ..	Soft	Soft	Good	Good	Good.
Ginning .. ..	..	Very well-ginned.	Well-ginned ..	Fairly well-ginned.	Well-ginned ..	Fairly well-ginned.	Well-ginned ..	Well-ginned.
Seeds .. ..	..	1.8% ..	1.5% ..	1.3% ..	Some with a leafy.	Fairly clean ..	Almost clean ..	Clean.
Card Sliver .. ..	..	Clean	Clean	Almost clean ..	Even, nep-free and shed much leaf.	Good	Fairly good ..	Even ; nep-free.
Card Web .. ..	..	Clear	Good	Good	Even, nep-free and shed much leaf.	Good	Fairly good ..	Even ; nep-free.
Weight of ten flat strips. ..	..	14.0 grams ; light.	17.6 grams ..	17.9 grams ..	19.5 grams ..	20.8 grams ..	20.7 grams ..	13.7 grams.
Remarks .. ..	..	Good sample ; staple fairly fine and strong.	.. ..	.. ..	Gave a leafy lap.	.. ..	.. ..	.. ..

(b) *Yarn* :—

		LATUR.						
		1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Cleanliness .. ..	..	Clean	Clean	Fairly-clean ..	Almost clean ..	A little leafy ..	Fairly clean ..	Clean.
Evenness .. ..	..	Even	Even	Even	Even	Even in the two lower counts.	Even	Fairly even.
Neppiness .. ..	..	A little neppy.	A little neppy.	Almost free of nep.	Practically free of nep.	Some with a neppy.	A little neppy.	Slightly neppy.
Slubbiness .. ..	..	.. ..	.. ..	.. ..	Shows an occasional slab.	.. ..	Slightly slubby.	.. ..
Remarks .. ..	..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..

3. *Spinning Test Details and Results* :—See Table 5 on page 15.

II. REPORT OF THE STANDARDS COMMITTEE FOR LATUR.

LATUR.									
	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.		
Contract valued under ..	F. G. Broach No. 2 ..	F. G. Broach No. 2 ..	F. G. M. G. Broach No. 2 ..	F. G. M. G. Broach Hedge Contract No. 2.	F. G. M. G. Broach Hedge Contract No. 2, April/May 1934 delivery.	F. G. M. G. Broach Hedge Contract No. 2, April/May 1935 delivery.	F. G. M. G. Broach Hedge Contract No. 2, April/May 1936 delivery.		
Class ..	Fine ..	Fully good ..	Fully good to fine ..	Fine ..	Fully good ..	Strict fine ..	Fine.		
Colour ..	White ..	Dull creamy ..	Considerably Bluish White and stains ..	White ..	Grey ..	Grayish white ..	Whitish.		
Staple Length ..	1 inch ..	Barely 7/8 inch ..	Full 7/8 inch ..	7/8 inch ..	7/8 inch ..	27/32 inch ..	7/8 inch.		
Staple Strength ..	Very strong ..	Good ..	Fair ..	Fair ..	Good ..	Good ..	Good.		
Regularity ..	Regular ..	Irregular ..	Fairly regular ..	Irregular ..	Irregular ..	Regular ..	Irregular.		
Value above or below contract rate.	Rs. 50 on F. G. Broach April/May.	Rs. 15 off ..	Rs. 30 on ..	Rs. 12 on ..	Rs. 20 on ..	Rs. 55 on ..	Rs. 30 on ..		
Basis ..	..	Rs. 222 ..	Rs. 175 ..	Settlement rate of F. G. M. G. Broach Hedge Contract No. 2, April/May 1933 delivery Rs. 177.	Fully Good M. G. Broach Hedge Contract No. 2, April/May 1934 delivery Rs. 202.	F. G. M. G. Broach Hedge Contract No. 2, April/May 1935 delivery Rs. 222.	F. G. M. G. Broach Hedge Contract No. 2, April/May 1936 delivery Rs. 180.		
Date of Valuation ..	28-1-30 ..	5-3-31 ..	9-5-32 ..	25-3-33 ..	8-3-34 ..	26-3-35 ..	2-3-36.		
Remarks ..	Black leaf ..	Slightly stained and black tenty.	....	....	....	....	....

Table 5.—SPINNING TEST RESULTS FOR LATUR COTTON.

Table 5.—SPINNING TEST RESULTS FOR LATOR FOR 1930.																															
1	2	3	4	5	6	7	WASTE PERCENTAGES.				RING FRAME PARTICULARS.*				YARN TEST RESULTS.										25	26	27.				
							Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss,†	Yarn Breakages per 100 Spindles per hour.	Front Roller Speed H.P.M.	Spindle Speed H.P.M.	Draft.	Turns per inch.	LEA.			BAIRSTO.			Twists per inch.	Liveness Class.	Neeps per yard.				Turns per inch Actual.	Spinning Room.	Relative Humidity (%).	Testing Room.
																Counts Nominal.	Weight of Sample, lbs.	Counts Actual.	Strength (lbs.)	Count Strength	Counts Actual.											Work of Rupture (inch-lb.)	Count-Work Product.
663	Latur	1029-30	0-5-30	20A	10	12.2	8.3	0.3	10.7	35	104	..	5.21	17.08	10.7	80.5	1704	10.0	120.4	2576	4	5.2	17.1	81	55	50					
668	Latur	1029-30	7-5-30	20B	..	..	..	..	..	10	103	..	5.32	20.23	10.8	84.8	1076	20.0	133.8	2070	4	4.2	10.2	82	00	50
1002	Latur	1030-31	14-5-31	20	16	13.1	9.5	0.5	21.8	0	105	0456	0.58	17.08	20.2	60.4	1402	20.0	122.2	2444	3	3.5	17.1	82	09	80					
1002	Latur	1030-31	11-5-31	21A	..	..	..	..	..	20	175	9475	0.70	10.73	23.8	53.8	1280	24.0	07.5	2430	4	1.0	18.7	81	07	60
1002	Latur	1030-31	10-5-31	21B	..	..	..	..	..	30	193	10500	0.80	20.74	24.4	53.0	1342	24.0	07.2	2420	5	3.7	10.7	80	04	08
1330	Latur	1031-32	18-5-32*	20	16	11.0	10.1	0.6	21.2	47	104	9530	0.34	17.08	20.1	65.2	1311	20.2	121.0	2444	4	1.5	17.4	00	71	06					
1339	Latur	1031-32	18-5-32	24A	..	..	..	..	..	40	160	0360	0.94	19.73	23.7	51.4	1218	23.0	00.4	2370	4	2.0	10.6	02	00	07
1339	Latur	1031-32	10-5-32	24B	..	..	..	..	..	30	174	9000	7.08	20.74	23.0	55.8	1317	23.0	101.2	2520	5	2.0	20.0	03	05	06
1728	Latur	1032-33	3-4-33	20	10	10.0	10.5	0.0	20.5	09	180	0200	5.07	17.08	16.8	72.0	1426	20.0	125.4	2508	4	1.5	17.4	88	05	06					
1726	Latur	1032-33	5-4-33	24A	..	..	..	..	..	80	171	0250	0.80	10.73	23.0	10.2	1176	21.1	102.4	2108	4	1.8	10.1	87	04	70
1726	Latur	1032-33	5-4-33	21B	..	..	..	..	..	100	184	10000	0.80	20.74	24.0	55.5	1332	23.7	103.2	2440	4	1.2	20.1	87	05	60
2101	Latur	1033-34	26-5-34	20	16	11.1	12.3	0.6	25.4	73	193	0456	6.22	17.08	20.3	72.2	1400	20.3	121.4	2525	3	2.2	17.2	85	00	72					
2101	Latur	1033-34	22-5-34	21	..	..	..	..	..	05	176	0450	5.80	10.73	23.0	00.5	1446	23.0	100.6	2310	4	2.8	18.8	81	71	71
2104	Latur	1033-34	22-5-34	30	..	..	..	..	..	53	140	0000	7.35	23.11	20.0	44.2	1308	20.7	92.4	2447	0	2.2	22.1	80	70	71
2713	Latur	1034-35	8-4-35	20	10	10.8	11.0	0.2	20.8	6	138	0000	5.05	17.08	20.3	79.8	1020	20.6	130.0	2078	3	1.0	17.1	83	06	04					
2713	Latur	1034-35	0-4-35	24	..	..	..	..	..	32	176	0600	5.80	10.73	21.1	02.0	1306	21.6	100.0	2081	4	2.0	19.6	83	05	08
2713	Latur	1034-35	0-4-35	30	..	..	..	..	..	17	138	8766	7.08	23.23	30.1	46.3	1481	30.7	90.0	2703	5	1.8	22.7	83	76	07
3112	Latur	1035-36	10-5-36	20	16	11.6	0.2	0.3	19.0	25	100	0350	5.80	17.08	20.3	03.3	1295	20.3	118.8	2412	4	1.8	17.3	78	61	03					
3112	Latur	1035-36	10-5-36	24	..	..	..	..	..	14	171	0350	6.38	10.73	23.0	47.2	1128	24.4	93.4	2523	5	1.5	18.0	80	63	03

* Diameter of ring frame front roller— $\frac{1}{8}$ inch. Diameter of ring— $\frac{1}{16}$ inch.

† It is to be noted that the total loss is for a small sample weighing 10 lbs.; for bulk sample spun under mill conditions it would be less than shown here.

6.—MUTTIA COTTON.

These samples have been very kindly supplied by the East India Cotton Association, after inspection and approval by their Standards Committee, in accordance with an arrangement made with the Association to supply to the Technological Laboratory, for testing, samples of fair average cotton of the commercial crop.

Sample No.	Cotton.	Place.	Season.	Sample No.	Cotton.	Place.	Season.
666	Muttia (F.G.)	Bhavnagar.	1929-30	1885	Muttia	Gondal ..	1932-33
667	" (Fine)	" ..	1929-30	2193	"	Bhavnagar ..	1933-34
1000	"	" ..	1930-31	2714	"	" ..	1934-35
1337	"	Botad	.. 1931-32	3113	"	Amreli ..	1935-36

I.—SPINNING TESTS.

1. Treatment :—

(a) Blow-room.—Upto 1934-35 (inclusive):—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).

1935-36 :—Hopper bale opener, Horizontal cleaner, Crighton (once), Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).

(b) Card-room.—Upto 1933-34 (inclusive):—Card, Drawing (2 heads), Slubber. Inter, Rover and spun from single hank roving on Ring Frame No. I, 1934-35 and 1935-36:—Same as above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. I possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) Cotton :—

	MUTTIA.							
	1929-30 (Fully good.)	1929-30 (Fine.)	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Colour	Creamy ..	Creamy; less dull, than F. G.	Dull creamy-white.	Creamy-white.	Dullish creamy-white.	White to creamy white.	Creamy-white; dullish.	White to creamy white.
Cleanliness ..	Very leafy ..	A trifle stained; very leafy.	Stained; very leafy.	Somewhat stained; very leafy—sand-like leaf.	Leafy ..	Stained; very leafy.	Stained; very leafy.	Stained; very leafy.
Feel	Dull .. ..	..	Poor .. ..	..	Softish ..	Rough ..	Roughish ..	Somewhat softish.
Ginning and pininess.	Nep. Ginning out the seeds badly.	Ginning has knotted a good deal and cut the seeds very badly indeed.	..	..	..	..	Somewhat knotted.	Fairly well ginned.
Seeds	2.2% and unginned.	1.26% ginned and unginned	0.75% seeds ..	1.4% ginned and unginned.	1.5% unginned	Contains many unginned seeds.	..	..
Card Sliver ..	Clean .. ..	..	Fairly clean ..	Clean	Clean	Almost clean ..	Almost clean ..	Almost clean.
Card Web	Clean	Somewhat neppy.	Good	Good	Good	Fairly good ..	Fairly good ..	Good.
Weight of 10 flat strips.	13.8 grams ..	17 grams.	12.6 grams ..	15.5 grams ..	21.9 grams ..	19.9 grams ..	18.4 grams ..	13.8 grams.
Remarks	Very wastey; a very poor sample indeed.	..	Very wastey ..	Responded well to treatment	..	..	..	..

(b) Yarn :—

	MUTTIA.							
	1929-30. (Fully good.)	1929-30 (Fine.)	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Cleanliness ..	Clean	Clean	Clean	Clean	Clean	Clean	Almost clean ..	Clean.
Evenness	Fairly even ..	Even	Even to fairly even.	Somewhat uneven.	Fairly even in the lower count.	Fairly even ..	Even	Even.
Neppiness	Fairly nep-free.	Free of nep ..	Fairly nep-free.	Practically free of nep.	Free of nep ..	Nep-free ..	Free of nep ..	Almost nep-free.
Slubbiness	Only occasional slab.	Free of slab ..	..	Fairly slubby ..	A trifle slubby.	..	A trifle slubby.	..
Remarks .. ..	..	A good round thread.	..	..	..	..	..	..

3. Spinning Test Details and Results :—See Table 6 on page 18.

II. REPORT OF THE STANDARDS COMMITTEE FOR MUTTIA.

17

MUTTIA.									
	1929-30 (Fully good.)	1929-30 (Fine.)	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.	
Contract valued under	Fully good Muttia	Fully good Muttia	Omra No. 3P.	G. M. G. Broach No. 2.	Fine M. G. Omra Hedge Contract No. 3 Dec./Jan. 1934 delivery.	Fine M. G. Omra Hedge Contract No. 3 March 1934 delivery.	Fine M. G. Omra Hedge Contract No. 3 May 1935 delivery.	Fine M. G. Omra Hedge Contract No. 3 March 1936 delivery.	
Class	Fully good	Barely fine	Fully good to fine	Fully good to fine	Superfine ..	Fine to superfine ..	Fine to superfine ..	Strict Fine.	
Colour	Greyish	Dull ..	Dull ..	Brownish ; some what stained.	Whitish ..	Whitish ..	Brownish-white ..	Whitish Dull.	
Staple Length ..	1 inch ..	1 inch ..	1 inch ..	1 inch ..	1 inch ..	1 inch ..	1 inch ..	1 inch.	
Staple Strength ..	Good to strong	Fair ..	Fair ..	Weak ..	Fair ..	Good ..	Good ..	Fair.	
Regularity ..	Rather irregular	Normal ..	Regular ..	Irregular ..	Regular ..	Regular ..	Fair ..	Regular.	
Value above or below contract rate.	Par ..	Rs. 5 on ..	Rs. 5 off ..	Rs. 20 off ..	Rs. 10 off ..	Rs. 10 off ..	Rs. 10 off ..	Rs. 7 off.	
Basis	Rs. 15 off fine Omra No. 3.	Rs. 15 off fine Omra No. 3.	Rs. 18 ..	Rs. 17 ..	Fine M. G. Omra No. 3 Dec./Jan. 1934 dely. Rs. 190.	Fine M. G. Omra H. C. No. 3 March 1934 dely. Rs. 176.	Fine M. G. Omra H. C. No. 3 May dely. Rs. 198.	Fine M. G. Omra Hedge Contract No. 3 March delivery Rs. 170.	
Date of valuation ..	28-1-30 ..	28-1-30 ..	15-3-31 ..	9-5-32 ..	26-7-33 ..	8-3-34 ..	20-3-35 ..	2-3-36.	
Remarks	Better than average Bhavnegar.	..	..	..	..	..	..	..

Table 6.—SPINNING TEST RESULTS FOR MUTTIA COTTON.

Sample No.	Cotton.	Season.	Date of spinning.	Counts Normal.	Weight of Sample, lbs.	WASTE PERCENTAGES.				RING FRAME PARTICULARS.*				YARN TEST RESULTS.						TEMPERATURE (°F.).	RELATIVE HUMIDITY (%).		
						Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss, †	Yarn Breakages per 100 Spindles	Front Roller Speed R.P.M.	Spindle Speed R.P.M.	Draft.	Turns per inch.	LEA.		BALISTIC.		Evenness Class.			Steps per yard.	Turns per inch Actual.
															Counts Actual	Strength (lbs.).	Counts Actual	Work Done (inch-lb.)						Count Product.
643	Muttia (Fully Ginned).	1929-30	5-2-30	10A	10	20.7	9.14	0.2	29.9	0	106	78.0	5.42	12.03	10.1	10.3	181.4	1808	5	2.2	12.1	82	00
644	"	1929-30	5-2-30	100						20	103	115.7	5.33	14.20	9.9	10.0	203.2	2032	5	2.7	13.7	82	57
647	Muttia (Fine)	1920-30	5-2-30	10A	10	20.6	0.5	0.3	21.4	10	101	86.7	5.42	12.03	9.8	9.7	207.2	2010	4	1.5	12.0	81	01
647	"	1920-30	5-2-30	10C						40	104	120.1	5.43	14.20	10.0	10.0	207.0	2070	4	2.2	13.0	81	04
1000	Muttia	1930-31	12-2-31	10	10	17.7	8.5	0.5	25.0	0	107	110.0	5.31	12.03	9.8	9.7	220.0	2227	3	2.2	12.0	80	70
1000	Muttia	1930-31	12-3-31	11A						27	170	54.3	5.42	14.08	13.0	13.8	135.2	1800	5	3.7	14.4	82	08
1000	Muttia	1930-31	13-2-31	11B						53	100	68.3	5.42	16.85	14.4	14.3	135.0	1030	5	3.5	16.3	82	05
1337	Muttia	1931-32	11-5-32	10	10	18.3	0.0	0.8	29.7	118	107	95.0	5.55	12.03	10.0	10.3	185.0	1012	4	1.2	12.2	80	06
1337	Muttia	1931-32	10-5-32	12						80	100	80.3	5.43	14.08	11.4	11.3	180.8	2110	4	1.2	14.0	80	06
1337	Muttia	1931-32	10-5-32	11						104	173	58.0	6.07	16.85	14.0	14.1	114.1	2970	5	1.0	16.5	80	08
1845	Muttia	1932-33	20-8-33	10A	10	13.9	12.2	0.5	24.2	127	123	75.5	5.37	12.03	9.7	9.7	214.8	2084	4	0.5	12.0	80	71
1845	Muttia	1932-33	20-8-33	10B						82	202	88.0	5.50	13.58	10.0	10.0	211.0	2113	4	0.2	13.1	85	74
1845	Muttia	1932-33	20-8-33	12						270	187	50.8	5.50	14.08	12.3	12.3	174.0	2102	5	0.5	14.0	80	72
2103	Muttia	1933-31	20-3-31	10	10	10.0	12.8	0.5	27.7	30	186	71.7	5.57	12.03	10.1	10.1	202.0	2010	4	0.5	12.3	81	60
2103	Muttia	1933-31	20-3-31	12A						87	177	55.4	5.08	13.92	11.8	12.1	108.4	2038	4	0.8	13.7	84	00
2103	Muttia	1933-31	20-3-31	12B						80	188	60.1	5.81	14.08	12.0	12.2	174.0	2123	4	0.5	14.5	84	00
2711	Muttia	1934-35	9-4-35	10	10	13.8	10.4	0.2	24.7	18	183	100.2	5.34	12.03	10.2	10.3	231.0	2385	3	0.5	12.0	82	60
2714	Muttia	1934-35	10-4-35	12A						0	186	81.2	5.48	13.92	12.0	12.2	100.0	2135	4	0.8	13.4	83	38
2714	Muttia	1934-35	10-4-35	12B						0	187	105.1	5.34	14.08	11.0	11.0	201.6	2399	4	0.5	11.2	83	74
3113	Muttia	1935-36	12-3-36	10	10	17.8	0.3	0.2	25.8	0	100	87.7	5.21	12.03	10.2	10.3	209.2	2153	3	1.0	12.2	83	00
3113	Muttia	1935-36	10-3-36	12A						22	180	55.1	5.43	13.92	12.5	12.4	182.8	2207	4	1.2	13.4	87	04
3113	Muttia	1935-36	10-3-36	12B						0	184	90.4	5.43	14.08	12.5	12.1	200.8	2130	4	1.0	14.1	88	71

* The ring frame front roller diameter.—† Diameter of rings.—‡ 11 is to be noted that the total loss is for a small sample weighing 10 lbs.; for bulk sample spun under mill conditions it would be less than shown here.

7.—PUNJAB-AMERICAN COTTON.

These samples have been very kindly supplied by the East India Cotton Association, after inspection and approval by their Standards Committee, in accordance with an arrangement made with the Association to supply to the Technological Laboratory, for testing, samples of fair average cotton of the commercial crop.

Sample No.	Cotton.	Place.	Season.
671	Punjab-American	Okara ..	1929-30
1046	"	" ..	1930-31
1352	"	Khanewal ..	1931-32
1882	"	Burewala ..	1932-33
2237	"	Khanewal ..	1933-34
2732	"	Chinchwatni	1934-35
3114	"	Phularwan ..	1935-36

I. SPINNING TESTS.

1. Treatment :—

(a) *Blow-room*.—Upto 1933-34 (inclusive):—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).

1934-35 and 1935-36:—Hopper bale opener, Horizontal cleaner, Crighton (once), Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).

(b) *Card-room*.—Upto 1933-34 (inclusive):—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.

1934-35 and 1935-36:—Same as above but spun from single hank roving on Ring Frame No. 3, which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) Cotton :—

	PUNJAB-AMERICAN.						
	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Colour	Creamy-white.	Creamy-white.	Creamy-white.	White to creamy-white.	White to creamy-white; bright.	White to creamy-white; bright.	White to creamy-white; bright.
Cleanliness	Somewhat leafy; a good deal stained.	Slightly stained; leafy.	Leafy; stained noticeably.	Somewhat leafy.	A little leafy.	Stained; fairly leafy.	A little leafy.
Feel	Good-bod i o d; slightly harsh.	Soft.	Softish.	Good.	Smooth good.	Good.	Good smooth.
Ginning and nep-piness.	Fairly knotted.	Only fairly well-ginned.	Fairly well-ginned.	Well-ginned.	Well-ginned but a trifle knotted.	Fairly well-ginned.	Well-ginned.
Seeds .. ..	.....	1.75% unginned.	1.1% unginned.	.....	.....	.....	.....
Card Sliver .. ..	.....	Fairly clean.	A little leafy.	Almost clean.	Clean.	Clean.	Clean.
Card Web	Good clear.	Slightly cloudy and neppy.	Somewhat neppy.	Good.	A little neppy.	Good.	Good.
Weight of 10 flat strips.	.....	19.8 grams.	21.6 grams.	25.5 grams.	21.5 grams.	24.5 grams.	13.7 grams.
Remarks	Responded to treatment.	.....	.....	.....	.....	.....	.....

(b) Yarn :—

	PUNJAB-AMERICAN.						
	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Cleanliness	Clean.	Clean but dull.	Fairly clean.	Clean.	Clean.	Almost clean.	Clean.
Evenness	Fairly even.	Fairly even.	Somewhat uneven.	Fairly even.	Even in the two lower counts.	Fairly even.	Even.
Neppiness	Fairly neppy.	A trifle neppy.	A little neppy.	Practically free of nep.	Free of nep.	A little neppy.	Almost nep-free
Slubbiness	A trifle slubby.	Slubby.	Slubby.	A trifle slubby.	.....	Somewhat slubby.	.....

3. *Spinning Test Details and Results* :—See Table 7 on page 21.

II. REPORT OF THE STANDARDS COMMITTEE FOR PUNJAB-AMERICAN.

PUNJAB-AMERICAN.							
	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Contract valued under ..	..	..	..	..	..	..	..
Class ..	..	..	..	..	..	..	..
Colour ..	..	..	..	..	..	..	..
Staple Length ..	..	..	..	..	..	..	..
Staple Strength ..	..	..	..	..	..	..	..
Regularity ..	..	..	..	..	..	..	..
Value above or below contract rate	Par.	Rs. 10 on.	Rs. 10 on.	Rs. 10 on.	Rs. 15 on.	Rs. 10 on.	Rs. 25 on.
Basis ..	Par, fully good Broach No. 2.	Rs. 182.	Rs. 164.	FG.M.G. Broach No. 2, July/Aug. 1933 delivery, Rs. 207.	FG.M.G. Broach No. 2, July/Aug. 1934 delivery, Rs. 197.	FG.M.G. Broach No. 2, July/Aug. 1935 delivery, Rs. 237.	FG.M.G. Broach No. 2, July/Aug. 1936 delivery, Rs. 189.
Date of Valuation ..	28-1-30.	5-5-31.	30-5-32.	20-7-33.	9-4-34.	15-4-35.	2-3-36.
Remarks ..	..	..	..	..	..	..	..

Table 7.—SPINNING TEST RESULTS FOR PUNJAB-AMERICAN COTTON.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	YARN TEST RESULTS.				25	26	27																
																					WASTE PERCENTAGES.							RING FRAME PARTICULARS.*				LEA.				TEMPERATURE & HUMIDITY (%)							
																					Blow Room Loss.	Card Room Loss.	Spiral Loss.	Total Loss.†				Yarn Breakages per 100 spindles per hour.	Front Roller Speed, R.P.M.	Spindle Speed, R.P.M.	Draft.	Turns per Inch.	Counts Actual.	Strength (lbs.).	Count-Strength Product.	Counts Actual.	Work of Rupture (inch-lb.).	Count-Work Product.	Evenness Class.	Neps per yard.	Turns per inch Actual.	Spiraling Room.	Spiraling Room.
671	Punjab American.	1020-30	10-2-36	20A	0	10.4	0.3	0.8	10.4	145	180	..	5.10	17.98	10.0	46.0	013	20.2	93.2	1883	4	4.2	17.2	80	02	85																	
"	"	"	"	20B		..	..	..	..	136	191	..	5.10	20.23	10.3	60.7	1202	20.3	100.2	2034	5	3.5	19.2	81	03	85													
1011	Punjab American.	1030-31	0-3-31	10	10	11.7	11.1	0.6	21.9	66	164	9000	5.32	15.97	15.7	63.5	1044	19.2	139.0	2252	3	1.5	15.5	90	07	89																	
"	"	"	11-5-31	20A		..	..	..	..	110	170	8700	6.05	17.98	20.0	40.0	800	20.3	103.8	2107	4	2.2	17.3	90	05	88													
"	"	"	"	20B		..	..	..	..	70	188	10700	6.05	20.23	10.9	54.1	1077	20.2	105.5	2133	5	2.5	10.5	89	06	87													
1332	Punjab American.	1031-32	6-6-32	10	10	11.7	11.5	0.6	22.3	10	162	8350	5.10	15.97	15.8	82.8	1308	15.7	182.0	2867	4	2.2	15.5	91	65	88																	
"	"	"	7-6-32	20		..	..	..	..	105	189	9200	6.23	17.98	20.2	51.0	1048	20.4	112.4	2293	5	2.0	17.4	90	00	70													
1492	Punjab American.	1032-33	18-8-33	10	10	8.8	13.5	0.5	21.6	218	180	8000	5.11	15.37	15.3	63.1	697	15.5	170.0	2635	4	1.2	15.4	86	73	70																	
"	"	"	19-8-33	20		..	..	..	..	228	170	8300	5.08	17.98	20.1	37.8	760	10.8	112.0	2218	5	1.6	17.0	87	08	70													
2237	Punjab American.	1033-34	19-4-34	16	10	7.5	10.7	0.6	17.0	24	168	8700	5.32	15.97	10.1	85.7	1371	15.8	186.2	2974	4	0.8	15.3	87	06	88																	
"	"	"	19-4-34	20		..	..	..	..	57	188	9200	5.10	17.98	10.3	70.1	1353	19.5	140.4	2738	4	0.8	17.1	87	05	88													
"	"	"	"	24		..	..	..	..	80	170	8500	0.25	20.74	24.3	51.4	1249	24.6	99.0	2450	6	1.0	10.8	87	07	88													
2722	Punjab American.	1034-35	12-6-35	12	10	7.8	11.8	0.5	19.1	73	174	6300	4.32	13.92	12.4	60.8	704	12.2	101.0	2397	4	1.0	13.1	90	09	70																	
"	"	"	5-6-35	16A		..	..	..	..	55	160	7100	5.54	15.97	15.8	38.0	607	15.7	122.8	1928	4	1.2	15.1	90	00	67													
"	"	"	4-6-35	16B		..	..	..	..	48	176	8700	5.70	17.98	16.8	45.8	769	10.5	127.0	2105	4	1.0	13.9	90	07	80													
3114	Punjab American.	1035-36	12-2-36	16	10	8.0	10.0	0.3	13.0	0	167	8650	5.55	13.97	10.1	102.1	1644	10.0	201.0	3294	3	1.0	15.5	81	02	60																	
"	"	"	"	20		..	..	..	..	10	190	6350	5.31	17.98	20.0	70.3	1539	19.0	141.6	2818	3	1.0	17.5	80	00	62													
"	"	"	"	24		..	..	..	..	27	171	6306	0.34	19.73	21.1	68.2	1403	23.6	115.5	2728	4	1.2	10.0	82	03	72													

* Diameter of ring frame front roller—7". Diameter of rings—14".

† It is to be noted that the total loss is for a small sample weighing 10 lbs. or thereabout; for bulk sample spun under mill conditions it would be less than shown here.

The performance of the 1934-35 sample is much below the average for this cotton.

8.—BROACH COTTON.

These samples have been very kindly supplied by the East India Cotton Association, after inspection and approval by their Standards Committee, in accordance with an arrangement made with the Association to supply to the Technological Laboratory, for testing, samples of fair average cotton of the commercial crop.

Sample No.	Cotton.	Place.	Season.
729	Broach	Broach	1929-30.
1023	"	"	1930-31.
1351	"	Miyagam	1931-32.
1782	"	Dabhoi	1932-33.
2235	"	Palej	1933-34.
2731	"	Broach	1934-35.
3263	"	Palej	1935-36.

I. SPINNING TESTS.

1. Treatment :—

(a) *Blow-room*.—Upto 1933-34 (inclusive) :—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).

1934-35. and 1935-36 :—Hopper bale opener, Horizontal cleaner, Crighton (once), Gridded dust-trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).

(b) *Card-room* :—Upto 1933-34 (inclusive) :—Card, Drawing (2 heads), Shubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.

1934-35 and 1935-36 :—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1. possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) *Cotton* :—

	BROACH.						
	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Colour	White to creamy-white.	White to creamy-white.	White to creamy-white; brightish.	Creamy white; bright.	White to creamy-white; bright.	White to brightish.	White to creamy-white.
Cleanliness	Clean; fairly bright.	Fairly clean; an occasional stain; very bright.	Fairly clean.	Clean.	Clean.	Fairly clean.	Fairly clean.
Feel	Good.	Good-bodied.	Good-bodied.	Good.	Smooth and bodied.	Good.	Softish.
Ginning and Noppiness	Well-ginned.	Well-ginned.	Well-ginned.	Well-ginned.	Well-ginned.	Well-ginned.	Well-ginned.
Seeds	1.75% unginned.	..	1% unginned.	2.2% unginned.	..	..	..
Card sliver	Clean.	Clean.	Almost clean.	Clean.	Clean.	Almost clean.	Clean.
Card web	Clean.	Very good.	Good.	Even and nopp-free.	Good.	Good.	Good.
Weight of ten flat strips	15.6 grams.	13.7 grams	16.2 grams.	15.4 grams.	16.9 grams.	21.9 grams.	18.8 grams.
Remarks .. .. .	..	..	..	..	..	..	..

(b) *Yarn* :—

	BROACH.						
	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Cleanliness	Clean. ..	Clean. ..	Clean. ..	Clean. ..	Fairly clean. ..	Almost clean ..	A little leafy.
Evenness	Fairly even ..	Fairly even ..	Even ..	Even ..	Fairly even ..	Even ..	Fairly even.
Noppiness	Fairly free of nopp.	Somewhat nappy.	A trifle nappy.	Free of nopp.	Almost free of nopp.	A little nappy.	Almost free of nopp.
Slubbiness .. .. .	..	A trifle slubby.	..	..	..	A little slubby.	Slightly slubby.

3. *Spinning Test Details and Results* :—See Table 8 on page 24.

Table 8.—SPINNING TEST RESULTS FOR BROACH COTTON.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	RELATIVE HUMIDITY. (%)																				
																												RING FRAME PARTICULARS*										YARN TEST RESULTS.									
																												WASTE PERCENTAGES.				Weight of Sample, lbs.	Counts Nominal.	Date of Spinning.	Blends.				Strength (lbs.)	Count-Strength Product.	Counts Actual.	Work of Rupture (inch-lb.)	Count-Work Product.	Evenness Class.	Neps per yard.	Turns per Inch. Actual.	Spinning Room.
Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss.†	Yarn Breakages per 100 spindles	Front Roller Speed 11. P. M.	Spindle Speed 11. P. M.	Draft.	Turns per Inch.	Counts Actual.	Count-Strength Product.	Counts Actual.	Work of Rupture (inch-lb.)	Count-Work Product.	Evenness Class.	Neps per yard.	Turns per Inch. Actual.	Spinning Room.	Spinning Room.																													
729	Broach ..	1929-30	13-5-30	16	10	6.6	8.6	0.5	13.9	57	182	..	5.20	15.97	15.7	53.5	871.	15.8	117.8	1861	4	1.5	15.2	90	92	60	61																				
729	Broach ..	1929-30	12-5-30	20		..	..	..	..	20	143	..	6.54	20.23	20.0	50.8	1016	20.0	90.0	1800	5	2.0	19.1	92																			
1023	Broach ..	1930-31	15-4-31	16A	10	8.3	9.2	0.6	17.2	53	183	8400	5.20	15.97	15.9	57.9	921	15.9	192.4	1940	3	2.0	15.5	91	98	67																					
1023	Broach ..	1930-31	15-4-31	16B		..	..	..	..	27	192	9000	5.20	18.10	15.9	70.2	1259	15.5	143.2	2220	4	1.7	17.4	90	95	60																	
1023	Broach ..	1930-31	15-4-31	20		..	..	..	..	75	170	9450	6.58	20.23	20.5	50.0	1025	20.4	95.0	1950	5	2.2	10.5	89	95	67																	
1351	Broach ..	1931-32	6-6-32	12	10	6.9	8.9	0.6	15.6	58	206	7800	4.15	13.92	12.2	92.5	1128	12.3	211.0	2003	3	2.5	13.3	90	98	68																					
1351	Broach ..	1931-32	6-6-32	16		..	..	..	..	83	186	8000	5.32	15.97	16.0	57.9	926	16.2	136.8	2054	4	2.0	15.3	90	95	66																	
1782	Broach ..	1932-33	20-5-33	12	10	7.5	8.9	0.4	16.0	51	203	7800	5.00	13.92	12.7	90.5	1226	12.6	207.6	2616	3	1.0	13.4	90	96	68																					
1782	Broach ..	1932-33	20-5-33	16		..	..	..	..	42	177	7800	5.31	15.97	15.9	71.0	1143	16.4	155.6	2552	4	1.5	15.5	90	97	70																	
2235	Broach ..	1933-34	16-4-34	12	10	6.2	10.0	0.5	16.6	7	208	7000	4.90	13.92	12.3	99.4	1223	12.2	216.0	2635	3	1.0	13.3	89	98	66																					
2235	Broach ..	1933-34	17-4-34	16		..	..	..	..	91	180	7950	5.21	15.97	16.3	66.3	1081	16.1	137.2	2209	4	1.0	16.1	88	70	68																	
2731	Broach ..	1934-35	5-6-35	12	10	6.6	11.3	0.3	17.4	29	188	7200	5.13	13.92	12.1	99.0	1198	12.2	207.2	2528	3	1.8	13.4	88	90	65																					
2731	Broach ..	1934-35	4-6-35	16A		..	..	..	..	24	174	7000	5.76	15.97	16.2	57.4	930	16.0	156.4	2562	3	1.0	15.4	89	97	65																	
2731	Broach ..	1934-35	4-6-35	16B		..	..	..	..	24	184	9000	5.89	17.98	16.0	69.0	1166	16.5	158.8	2620	3	1.2	17.1	89	97	66																	
3263	Broach ..	1935-36	6-7-36	12	10	7.2	10.2	0.5	17.0	59	194	7450	5.54	13.92	12.0	78.8	946	12.1	191.2	2314	4	1.2	13.5	87	71	70																					
3263	Broach ..	1935-36	6-7-36	16A		..	..	..	..	91	180	8000	5.07	15.97	15.8	53.1	839	15.6	130.6	2037	4	0.8	16.4	87	74	72																	
3263	Broach ..	1935-36	4-7-36	16B		..	..	..	..	42	192	9500	5.79	17.98	16.1	72.5	1167	16.2	133.6	2161	5	1.0	17.3	85	77	69																	

* Diameter of ring frame front roller—7/8". Diameter of rings—1 6/8".

† It is to be noted that the total loss is for a small sample spun under mill conditions it would be less than shown here.

9.—JAGADIA COTTON.

These samples have been very kindly supplied by the East India Cotton Association, after inspection and approval by their Standards Committee, in accordance with an arrangement made with the Association to supply to the Technological Laboratory, for testing, samples of fair average cotton of the commercial crop.

Sample No.	Cotton.	Place.	Season.	Sample No.	Cotton.	Place.	Season.
730	Jagadia.	Jagadia.	1929-30.	2296	Jagadia.	Jagadia.	1933-34.
1047	"	"	1930-31.	2733	"	"	1934-35.
1355	"	"	1931-32.	3262	"	"	1935-36.
1786	"	"	1932-33.				

I. SPINNING TESTS.

1. Treatment :—

(a) *Blow-room*.—Upto 1933-34 (inclusive) :—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).

1934-35 and 1935-36 :—Hopper bale opener, Horizontal cleaner, Crighton (once), Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).

(b) *Card-room*.—Upto 1933-34 (inclusive) :—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.

1934-35 and 1935-36 :—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) Cotton :—

	JAGADIA.						
	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Colour	White to creamy white; bright.	White to creamy white; bright.	White; bright.	White; brightish.	White to creamy white; bright.	White; brightish.	White to creamy white; brightish.
Cleanliness .. .	Fairly clean.	Fairly clean.	Somewhat leafy.	Fairly clean.	Fairly clean.	A little stained; fairly clean.	Fairly leafy.
Feel .. .	Bodied and silky.	Good silky.	Good soft.	Good softish.	Good soft.	Good.	Good smooth.
Ginning and neppiness ..	Well-ginned.	Well-ginned.	Well-ginned.	Well-ginned.	Well-ginned.	Well-ginned.	Well-ginned.
Seeds .. .	Occasional nut seed.	..	1.5% unginned.	..	..	..	..
Card sliver .. .	Clean.	Clean.	Clean.	Clean.	Clean.	Clean.	Clean.
Card web .. .	Clear and even.	Good.	Good.	Even and nep-free.	Full and free of nep.	Web good.	Even; nep-free
Weight of ten flat strips ..	12.2 grams.	10.5 grams.	13.2 grams.	14.9 grams.	15.9 grams.	10.3 grams.	10.5 grams.
Remarks .. .	A very good commercial sample.	..	..	..	..	..	..

(b) Yarn :—

	JAGADIA.						
	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Cleanliness .. .	Clean.	Clean.	Clean.	Clean.	Clean.	Fairly clean.	A little leafy.
Evenness .. .	Fairly even.	Even.	Even.	Fairly even.	Even.	Even.	Even.
Neppiness .. .	Fairly free of nep.	Fairly free of nep.	Almost free of nep.	Almost nep-free	Almost free of nep.	Fairly free of nep.	Practically free of nep.
Slubbiness .. .	..	..	..	..	..	..	..

3. *Spinning Test Details and Results* :—See Table 9 on page 27.

II. REPORT OF THE STANDARDS COMMITTEE FOR JAGADIA COTTON.

JAGADIA.							
		1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.
		1935-36.					
Contract valued under	F. G. M. G. Broach No. 2.	F. G. M. G. Broach No. 2.	F. G. M. G. Broach No. 2.	F. G. M. G. Broach No. 2.	F. G. M. G. Broach No. 2.
	F. G. M. G. Broach No. 2.	F. G. M. G. Broach No. 2.	F. G. M. G. Broach No. 2.	F. G. M. G. Broach No. 2.	F. G. M. G. Broach No. 2.
Class
Colour
Staple Length
Staple Strength
Regularity
Value above or below contract rate
Basis
Date of valuation
Remarks

TABLE 9.—SPINNING TEST RESULTS FOR JAGADIA COTTON.

123456789101112131415161718192021222324252627																												
Sample No.	Cotton.	Season.	Date of Spinning.	WASTE PERCENTAGES.				RING FRAME PARTICULARS.*				YARN TEST RESULTS.										TEMPERATURE (%).	RELATIVE HUMIDITY (%).					
				Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss.†	Yarn Breakages per 100 spindles per hour.	Front Roller Speed R.P.M.	Spindle Speed R.P.M.	Draft.	Turns per inch.	L.S.A.			D.A.T.E.S.T.O.			Keps per yard.	Turns per inch Actual.	Spiraling Room.			Spiraling Room.				
													Counts Actual.	Strength (lbs.)	Count-strength product.	Counts Actual.	Work of Rsp. (inch-lbs.)	Count-Work Product.										
730	Jagadia ..	1929-30	12-5-30	8.3	7.8	0.7	16.1	8	173	..	7.35	10.73	24.0	01.4	1474	23.0	88.4	2113	3	2.7	10.0	00	05	02	01	02	01	02
730	Jagadia ..	1929-30	12-5-30	..	..	..	..	03	158	..	0.64	21.80	30.5	38.0	1150	30.5	55.2	1084	5	2.2	21.1	01	02	01	01	02	01	01
1017	Jagadia ..	1930-31	11-5-31	8.3	8.0	0.5	10.0	34	190	0800	6.41	17.08	10.0	77.4	1540	20.5	113.2	2321	3	1.7	17.4	00	03	07	07	03	07	07
1017	Jagadia ..	1930-31	12-6-31	..	..	..	..	0	178	9300	0.50	19.73	24.1	01.0	1470	24.4	07.2	2372	4	1.5	10.1	00	05	07	07	05	07	07
1017	Jagadia ..	1930-31	12-5-31	..	..	..	..	23	150	9800	7.88	23.11	29.8	45.4	1353	30.3	70.4	2100	5	2.0	22.2	90	00	00	00	00	00	00
1333	Jagadia ..	1931-32	0-4-32	8.0	7.5	0.6	16.3	50	104	9500	5.05	17.08	20.0	70.0	1502	20.2	120.4	2553	3	1.2	17.4	01	07	30	30	07	30	30
1355	Jagadia ..	1931-32	0-4-32	..	..	..	..	24	177	9350	7.14	10.73	24.1	50.3	1420	24.1	101.0	2449	4	1.2	10.0	02	06	00	00	06	00	00
1355	Jagadia ..	1931-32	8-4-32	..	..	..	..	40	100	0000	7.00	21.86	20.2	47.1	1375	20.8	84.0	2521	4	1.8	21.3	01	08	65	65	08	65	65
1786	Jagadia ..	1932-33	1-6-33	8.0	8.8	0.5	10.5	41	180	0650	5.54	10.73	23.0	63.2	1510	23.7	108.8	2579	4	1.2	10.1	80	08	70	70	08	70	70
1786	Jagadia ..	1932-33	1-6-33	..	..	..	..	122	153	9100	0.71	21.80	20.8	40.4	1383	30.3	82.4	2407	5	2.0	21.3	91	08	70	70	08	70	70
2200	Jagadia ..	1933-34	22-5-34	0.0	8.5	0.3	14.8	10	198	0760	5.85	17.08	20.2	88.8	1704	20.0	138.8	2653	3	1.8	17.3	00	08	60	60	08	60	60
2200	Jagadia ..	1933-34	22-5-34	..	..	..	..	0	180	0300	5.45	10.73	23.0	72.0	1735	24.2	111.8	2708	4	1.8	10.1	00	08	08	08	08	08	08
2206	Jagadia ..	1933-34	22-5-34	..	..	..	..	20	150	0500	0.71	21.80	29.5	53.0	1581	20.0	88.4	2043	5	1.5	21.2	88	08	70	70	08	70	70
2733	Jagadia ..	1934-35	5-6-35	7.5	8.3	0.4	15.0	10	192	0920	5.95	17.08	20.5	75.5	1519	20.5	120.0	2505	3	1.8	17.1	88	06	00	00	06	00	00
2733	Jagadia ..	1934-35	0-6-35	..	..	..	..	36	170	0500	5.33	10.73	24.0	04.0	1530	24.3	108.2	2020	3	1.5	10.0	00	07	00	00	07	00	00
2733	Jagadia ..	1934-35	0-6-35	..	..	..	..	17	142	8300	6.97	21.50	20.1	48.9	1423	20.7	80.4	2055	5	2.0	21.3	80	08	08	08	08	08	08
3202	Jagadia ..	1935-36	3-7-36	7.5	8.8	0.3	15.0	5	190	0550	5.05	17.08	20.1	88.1	1771	20.2	128.0	2508	3	1.0	17.2	86	77	08	08	77	08	08
3202	Jagadia ..	1935-36	3-7-36	..	..	..	..	0	171	0000	5.55	19.73	23.9	70.0	1073	23.0	100.4	2543	4	1.5	18.8	87	70	08	08	87	70	08
3202	Jagadia ..	1935-36	4-7-36	..	..	..	..	20	152	0550	0.01	21.86	29.7	40.7	1470	30.2	83.0	2507	4	1.0	20.8	87	73	70	70	87	73	70

* Diameter of ring frame front roller—7/8". Diameter of rings—1 5/8".

† It is to be noted that the total loss is for a small sample weighing 10 lbs. or thereabout; for a bulk sample spun under mill conditions it would be less than shown here.

10.—SURAT COTTON.

These samples have been very kindly supplied by the East India Cotton Association, after inspection and approval by their Standards Committee, in accordance with an arrangement made with the Association to supply to the Technological Laboratory, for testing, samples of fair average cotton of the commercial crop.

Sample No.	Cotton.	Place.	Season.
731	Surat.	Surat.	1929-30.
1022	Surat.	Surat.	1930-31.
1353	Surat.	Kosamba.	1931-32.
1783	Surat.	Surat.	1932-33.
2236	Surat.	Surat.	1933-34.
2837	Surat.	Surat.	1934-35.
3163	Surat.	Surat.	1935-36.

I.—SPINNING TESTS.

1. Treatment :—

- (a) *Blow-room*.—Upto 1933-34 :—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).
1934-35 and 1935-36 :—Hopper bale opener, Horizontal cleaner, Crighton (once), Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).
- (b) *Card-room*.—Upto 1933-34 :—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.
1934-35 and 1935-36 :—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) Cotton :—

	SURAT.						
	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Colour	White; bright.	White to creamy-white.	White; brightish.	Creamy-white; bright.	White to creamy-white; bright.	White to creamy-white; bright.	White; bright.
Cleanliness	Fairly clean; a trifle stained.	Fairly clean; very bright.	Somewhat leafy.	Fairly clean.	Clean.	Fairly leafy.	Clean.
Feel	Good silky.	Very soft.	Soft silky.	Good smooth.	Good soft.	Good	Smooth and bodied.
Ginning and Neppiness ..	Well-ginned.	Well-ginned.	Well-ginned.	Well-ginned.	Well-ginned.	Fairly well-ginned.	Well-ginned.
Seeds .. ..	..	..	..	..	1% unginned.	Good amount of unginned seeds.	..
Card Sliver	Clean.	Clean.	Almost clean.	Almost clean.	Clean.	A little leafy.	Clean.
Card Web	Even and clear.	Very good.	Fairly good.	Even and nep-free.	Good.	Full.	Even and nep-free.
Weight of ten flat strips ..	13.7 grams.	11.0 grams.	14.3 grams.	15.1 grams.	14.7 grams.	18.1 grams.	12.3 grams.
Remarks	A very desirable cotton.	..	..	..	..	..	..

(b) Yarn :—

	SURAT.						
	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Cleanliness	Clean.	Fairly clean.	Clean.	Clean.	Clean.	Clean.	Almost clean.
Evenness	Fairly even.	Even.	Even.	Fairly even.	Fairly even.	Even.	Even.
Neppiness	A little neppy.	Practically free of nep.	Almost free of nep.	Free of nep.	Fairly free of nep.	A little neppy.	Free of nep.
Slubbiness .. ..	..	..	..	..	..	Occasionally slubby.	..

3. Spinning Test Details and Results :—See Table 10 on page 30.

Table 10.—SPINNING TEST RESULTS FOR SURAT COTTON.

Sample No.	Cotton.	Season.	Date of Spinning	Counts Nominal.	Weight of Samples, lbs.	WASTE PERCENTAGES.				RING FRAME PARTICULARS.*						LKA.				BALISTIC.						TEMPERATURE AFTER SPINNING (°F.)		RELATIVE HUMIDITY %	
						Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss.†	Yarn Breakages per 100 spindles	Front Roller speed R.P.M.	Spindle speed R.P.M.	Draft.	Turns per inch.	Counts Actual.	Strength lbs.	Count Strength Product.	Counts Actual.	Work of Machine (inch-lb.)	Count Product.	Evenness Class.	Keps per yard.	Turns per inch Actual.	Spinning Room.	Spinning Room.	Spinning Room.	Spinning Room.	Spinning Room.	Spinning Room.
731	Surat	1929-30	13-5-30	24	10	7.0	7.7	0.2	14.4	12	172	..	8.00	19.73	23.8	56.3	1340	24.3	82.2	1697	4	2.5	18.0	01	00	01	00	01	00
731	Surat	1929-30	14-5-30	30		..	..	..	..	30	135	..	0.29	24.52	30.2	43.2	1365	31.1	50.4	1847	0	3.0	23.6	89	00	89	00	89	00
1022	Surat	1930-31	14-4-31	24	10	7.0	7.5	0.5	14.5	0	180	9700	0.19	19.73	23.8	62.4	1485	25.0	101.8	2102	3	1.2	18.8	90	08	90	08	08	05
1022	Surat	1930-31	14-4-31	30		..	..	..	..	20	100	10800	8.03	24.53	30.4	13.4	1319	31.0	70.0	2108	4	1.7	23.5	91	08	91	08	08	07
1353	Surat	1931-32	7-6-32	20	10	8.0	8.2	0.0	15.9	0	195	9650	5.95	17.98	20.2	73.2	1478	20.1	110.8	2345	3	1.5	17.3	99	07	99	07	07	06
1353	Surat	1931-32	7-6-32	24		..	..	..	..	32	178	9550	7.00	10.73	21.1	57.6	1388	23.7	94.2	2233	4	1.8	19.1	91	05	91	05	07	06
1353	Surat	1931-32	8-6-32	30		..	..	..	..	53	159	9500	6.94	21.80	20.6	42.2	1240	29.3	78.0	2290	4	2.0	21.2	91	07	91	07	06	06
1783	Surat	1932-33	30-5-33	20	10	7.2	8.2	0.5	15.2	114	195	9700	5.68	17.98	20.1	71.2	1431	20.1	125.2	2517	1	1.0	17.2	90	00	90	00	00	08
1783	Surat	1932-33	30-5-33	24		..	..	..	..	118	178	9650	6.22	19.73	21.0	51.8	1315	25.9	102.2	2443	5	1.2	18.8	91	05	91	05	06	06
2230	Surat	1933-34	17-4-34	20	10	6.6	7.8	0.5	14.3	5	109	9850	5.93	17.98	20.5	89.7	1839	20.7	130.8	2708	3	1.5	17.3	88	00	88	00	00	00
2230	Surat	1933-34	17-4-34	24		..	..	..	..	27	182	9800	5.43	19.73	24.4	73.8	1776	25.1	106.8	2681	4	1.2	19.1	89	00	89	00	00	00
2230	Surat	1933-34	18-4-34	30		..	..	..	..	30	160	9700	6.79	21.80	30.8	50.1	1513	31.0	86.2	2724	5	1.5	21.1	88	70	88	70	08	08
2230	Surat	1933-34	19-4-34	40		..	..	..	..	38	140	9500	9.00	25.28	40.8	32.4	1322	40.4	66.0	2660	0	1.8	24.4	87	08	87	08	08	08
2837	Surat	1934-35	29-5-35	20	10	8.1	9.5	0.3	17.1	5	105	9500	5.83	17.98	20.2	100.6	2620	20.1	143.6	2860	3	2.2	17.1	84	80	84	80	80	80
2837	Surat	1934-35	30-5-35	30		..	..	..	..	7	100	9550	0.47	21.86	28.0	58.6	1094	29.1	61.8	2671	4	2.0	20.0	84	78	84	78	78	78
2837	Surat	1934-35	30-5-35	40		..	..	..	..	29	140	9600	8.83	25.28	40.7	32.7	1331	40.5	65.0	2657	5	1.8	24.1	85	70	85	70	80	80
3103	Surat	1935-36	4-5-36	20	10	3.4	7.0	0.2	10.4	0	104	9700	5.35	17.98	20.4	76.7	1505	20.6	110.0	2451	3	0.5	17.5	89	67	89	67	70	70
3103	Surat	1935-36	2-5-36	24		..	..	..	..	14	178	9550	5.33	19.73	21.1	62.0	1494	24.4	101.2	2542	4	1.0	10.1	86	69	86	69	70	70
3103	Surat	1935-36	1-5-36	30		..	..	..	..	36	118	8900	0.41	21.86	30.9	37.7	1165	31.3	80.4	2317	5	0.8	21.1	89	60	89	60	08	08

* Diameter of ring frame front roller—17". Diameter of ring—14".
† It is to be noted that the total loss is for a "trial" sample weighing 10 lbs., for bulk sample spun under mill conditions it would be less than shown here.

11.—NAVSARI COTTON.

These samples have been very kindly supplied by the East India Cotton Association, after inspection and approval by their Standards Committee, in accordance with an arrangement made with the Association to supply to the Technological Laboratory, for testing, samples of fair average cotton of the commercial crop.

Sample No.		Cotton.	Place.	Season.	Sample No.		Cotton.	Place.	Season.
732	..	Navsari.	Navsari.	1929-30.	2435	..	Navsari.	Navsari.	1933-34.
1048	..	"	"	1930-31.	2828	..	"	"	1934-35.
1354	..	"	"	1931-32.	3162	..	"	"	1935-36.
1784	..	"	"	1932-33.					

I.—SPINNING TESTS.

1. Treatment :—

(a) *Blow-room.*—Upto 1933-34 :—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).
1934-35 and 1935-36 :—Hopper bale opener, Horizontal cleaner, Crighton (once), Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).

(b) *Card-room.*—Upto 1933-34 :—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.

1934-35 and 1935-36 :—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) Cotton :—

	NAVSARI						
	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Colour	White; very bright.	White to Creamy-white; bright.	White; bright.	White to Creamy-white; bright.	White; bright.	White; bright.	White; bright.
Cleanliness	A trifle leafy.	Clean to fairly clean.	Fairly clean.	Fairly clean.	Clean.	Clean.	Clean.
Feel	Soft and silky.	Silky and bodied.	Very good.	Silky and bodied.	Smooth bodied.	Good.	Smooth and bodied.
Ginning and Noppiness ..	Well-ginned.	Well-ginned.	Well-ginned.	Well-ginned.	Fairly well-ginned.	Well-ginned.	Well-ginned.
Seeds	1.25% unginned.	..	..	..	..	..	..
Card Sliver	Clean.	Clean.	Clean.	Clean.	Clean.	Soft; clean.	Clean.
Card Web	Clear and even.	Very good.	Good.	Even and nep-free.	Full.	Full.	Even and Nep-free.
Weight of ten flat strips ..	13.3 grams.	8.1 grams; very light.	13.5 grams.	13.5 grams.	20.7 grams.	19.0 grams.	13.3 grams.
Remarks .. ..	..	A very desirable cotton.	..	..	..	..	..

(b) Yarn :—

	NAVSARI						
	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Cleanliness	Clean.	Clean.	Clean.	Clean.	A little leafy.	Clean.	Clean.
Evenness	Somewhat uneven.	Even.	Even.	Fairly even.	Fairly even.	Even.	Very even.
Neppiness	Neppy.	Fairly free of nep.	Almost free of nep.	Free of nep.	Fairly free of nep.	A trifle neppy.	Nep-free.
Slubbiness .. ..	..	..	..	..	..	..	..

3. *Spinning Test Details and Results* :—See Table 11 on page 33.

II.—REPORT OF THE STANDARDS COMMITTEE FOR NAVSARI COTTON.

[illegible]

Table 11.—SPINNING TEST RESULTS FOR NAVSARI COTTON.

53

Sample No.	Cotton.	Season.	Date of Spinning.	WASTE PERCENTAGES.				RING FRAME PARTICULARS.*				YARN TEST RESULTS.										TEMPERATURE AND HUMIDITY (%).		
				Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss.†	Yarn Breakages per 100 Spindles per hour.	Front Roller Speed R.P.M.	Spindles Speed R.P.M.	Draft.	Turns per inch.	LEA			BALLETING.			Evenness Class.	Keps per yard.	Turns per inch Actual.	Spinning Room.	Spinning Room.	Testing Room.
													Counts Actual.	Strength (lbs.).	Count-Strength	Counts Actual.	Work of Rupture (inch-lb.).	Count-Work Product.						
772	Navari ..	1929-30	13-5-30	..	8.0	0.7	15.1	68	172	..	8.50	19.73	24.3	55.4	1346	24.3	80.4	1954	4	4.2	18.8	91	60	90
772	Navari ..	1929-30	14-5-30	..	..	..	..	47	135	..	8.97	24.52	30.5	42.0	1281	31.3	58.4	1828	0	4.5	23.5	80	60	61
1018	Navari ..	1930-31	11-5-31	8.5	7.2	0.4	13.7	0	190	9800	0.41	17.98	20.1	72.5	1457	20.2	117.2	2387	3	1.2	17.3	90	63	67
1018	Navari ..	1930-31	12-5-31	..	..	..	..	0	178	9806	0.38	19.73	24.0	54.0	1206	24.1	98.2	2387	4	1.5	19.1	90	65	60
1018	Navari ..	1930-31	12-5-31	..	..	..	..	37	150	9800	7.05	23.11	29.1	44.7	1361	20.7	81.0	2466	5	2.0	22.4	80	65	90
1351	Navari ..	1931-32	7-6-32	..	7.7	0.4	13.1	0	195	9050	5.98	17.98	10.8	78.8	1560	10.8	135.6	2085	3	1.8	17.4	90	67	60
1354	Navari ..	1931-32	7-6-32	..	..	..	..	32	178	9550	7.00	19.73	24.2	57.7	1396	24.0	99.4	2445	4	2.0	19.2	91	65	68
1354	Navari ..	1931-32	8-6-32	..	..	..	..	40	159	9500	9.94	21.86	28.4	48.0	1393	28.2	87.0	2453	5	2.0	21.4	91	67	66
1781	Navari ..	1932-33	30-5-33	0	8.0	0.4	14.1	73	178	9050	5.53	19.73	24.0	62.5	1500	23.7	164.4	2474	4	1.0	10.0	91	98	07
1781	Navari ..	1932-33	31-5-33	..	..	..	..	80	154	9050	7.00	21.86	30.9	44.2	1320	29.7	84.2	2501	4	1.0	20.9	91	96	72
2135	Navari ..	1933-34	9-8-34	10	10.4	0.3	15.9	0	197	9550	5.50	17.98	20.9	65.0	1763	20.3	131.4	2987	3	2.8	17.2	84	80	82
2135	Navari ..	1933-34	9-8-34	30A	..	..	..	10	102	9500	9.58	21.80	30.0	40.1	1473	29.4	88.2	2593	5	2.5	21.9	84	80	81
2135	Navari ..	1933-34	9-8-34	34	..	..	..	36	146	9650	7.42	23.26	33.4	40.4	1340	33.1	78.8	2608	0	2.5	22.4	84	80	81
2928	Navari ..	1934-35	26-8-35	10	10.0	0.5	15.8	10	196	9500	5.95	17.98	20.7	80.5	1791	29.7	131.8	2790	3	2.5	17.0	86	90	72
2928	Navari ..	1934-35	24-8-35	..	..	..	..	5	178	9700	5.29	19.73	23.6	70.2	1798	23.8	110.0	2775	3	2.0	10.0	85	72	72
2928	Navari ..	1934-35	24-8-35	30A	..	..	..	39	137	9500	6.71	21.80	31.2	48.5	1513	31.5	85.4	2600	4	2.9	20.7	86	71	70
3102	Navari ..	1935-36	30-4-36	10	7.1	0.3	10.4	5	193	9600	5.85	17.98	20.0	83.8	1710	10.9	125.2	2491	3	0.5	17.2	80	90	70
3102	Navari ..	1935-36	30-4-36	..	..	..	..	27	178	9700	5.43	19.73	21.3	83.5	1543	24.1	104.0	2521	3	0.8	19.1	80	71	71
3102	Navari ..	1935-36	1-5-36	..	..	..	..	26	156	8900	9.41	21.86	29.5	40.3	1154	20.0	86.8	2540	4	0.5	21.0	80	68	72

* Diameter of ring frame front roller—1½". Diameter of ring 14".
† It is to be noted that the total loss is for a small sample weighing 10 lbs. or thereabout; for bulk sample spun under mill conditions it would be less than shown here.

12.—DHOLLERAS COTTON.

These samples have been very kindly supplied by the East India Cotton Association, after inspection and approval by their Standards Committee, in accordance with an arrangement made with the Association to supply to the Technological Laboratory, for testing, samples of fair average cotton of the commercial crop.

Sample No.	Cotton.	Place.	Season.
724	Dholleras (Fine) Vagadia	Wadhwan	1929-30.
725	Dholleras (Superfine) Vagadia	"	1929-30.
1126	Dhollera Vagadia	"	1930-31.
1368	" "	Limbdi	1931-32.
1886	" "	Kadi	1932-33.
2357	" "	Wadhwan	1933-34.
2830	" "	Manavadar	1934-35.
3231	" "	Bawla	1935-36.

I.—SPINNING TESTS.

1. Treatment :—

(a) *Blow-room*.—Upto 1933-34 (inclusive) :—Poreupine, Crighton (twice), Hopper, Scutcher (3 times).

1934-35 and 1935-36 :—Hopper bale opener, Horizontal cleaner, Crighton, Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).

(b) *Card-room*.—Upto 1933-34 (inclusive) :—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.

1934-35 and 1935-36 :—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) *Cotton* :—

DHOLLERAS.								
Season.	1929-30. (Fine)	1929-30. (Superfine)	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Colour	White to creamy-white.	Dullish white.	Creamy-white.	Dullish white.	White to creamy-white; brightish.	White to creamy-white; fairly bright.	Dullish to creamy-white.	White to creamy-white; bright.
Cleanliness	Very leafy (sand-like leaf); a good deal stained.	Leafy; slightly stained.	Leafy; occasional spot of stain.	Leafy.	Somewhat leafy.	Very leafy with occasional stains.	Stained; leafy.	Fairly leafy.
Feel .. ..	..	Better feel than Fine Dholleras.	Somewhat soft.	Good.	Good.	Good.	Fairly good.	Good bodied.
Ginning and neppiness	Fairly well-ginned.	Fairly well-ginned.	Fairly well-ginned.	Well-ginned.	..	Well-ginned.	Somewhat knotted.	Well-ginned.
Seeds	Occasional cut; a fair amount of unripe fibre and 2 per cent. seeds—mostly unginned.	..	1.5% unginned.	2.1% ginned and unginned.	2% partly ginned.	3.75% unginned (kapas).	..	..
Card Sliver	Clear.	Clear.	A little leafy.	Almost clean.	Clean.	Fairly clean.	Almost clean.	Almost clean.
Card Web	Clear.	Clear.	Even and practically nepp-free.	Good.	Even and nepp-free.	Good.	Good.	Good.
Weight of 10 flatstrips	16.3 grams.	..	21.2 grams.	13.5 grams.	18.0 grams.	20.2 grams.	21.6 grams.	15.4 grams.
Remarks	A poor, wasty sample.	Staple fine for its length but irregular in length and strength.	Fully pressed.	Fully pressed.	..	..	..	..

(b) *Yarn* :—

DHOLLERAS.								
Season.	1929-30. (Fine.)	1929-30 (Superfine.)	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Cleanliness	Fairly clean	Clean	Fairly clean	Clean	Clean	Clean	Fairly clean	Almost clean.
Evenness	Fairly even	Somewhat uneven.	Fairly even	Even	Even	Even	Even	Even.
Neppiness	A little nappy.	A little nappy.	Fairly neppy.	Free of nepp	Free of nepp	Slightly nappy.	Almost free of nepp.	Practically free of nepp.
Slubbiness	Slubby	Slubby	..	..	..	..	..	..

3. *Spinning Test Details and Results* :—See Table 12 on page 36.

II.—REPORT OF THE STANDARDS COMMITTEE FOR DHOLLERAS COTTON.

DHOLLERAS.									
	1929-30 (Fine.)	1929-30 (Superfine.)	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.	
Contract valued under	F. G. M. G. Broach	F. G. M. G. Broach	F. G. M. G. Broach No. 2.	F. G. M. G. Broach No. 2.	F. G. M. G. Broach No. 2, July/August 1933 delivery.	F. G. M. G. Broach H. C. No. 2, July/ August 1934.	F. G. M. G. Broach H. C. No. 2, July/ August 1935 deli- very.	F. G. M. G. Broach Hedge Contract No. 2, April/May 1936 delivery.	
Class	Fine	Strict superfine	Fine	Fine to superfine	Superfine	Fully good to fine	About fine	Superfine.	
Colour	Silvery	Silvery	Bluish white	Bluish white	White	White	Creamy	White.	
Staple Length	5/8-7/8 inch	7/8 inch	Barley 3/4 inch	13/10 inch	13/10 inch	13/10 inch	3/4 inch	13/16 inch.	
Staple Strength	Poor	Fair	Weak	Good	Good	Good	Fair	Good.	
Regularity	Irregular	Fair	Irregular	Regular	Regular	Regular	Fair	Slightly irregular.	
Value above or below contract rate	Par	Rs. 7 on	Par	Rs. 7 on	Rs. 7 on	Rs. 5 on	Par	Rs. 5 on.	
Basis	Rs. 255	Rs. 255	Rs. 177	Rs. 152	F. G. M. G. Broach No. 2, July/August 1933 delivery Rs. 207.	F. G. M. G. Broach H. C. No. 2, July/ August 1934 delivery Rs. 208.	F. G. M. G. Broach H. C. No. 2, July/ August 1935 delivery Rs. 224.	F. G. M. G. Broach Hedge Contract No. 2, April/May 1936 delivery Rs. 107.	
Date of Valuation	20-4-30	20-4-30	14-7-31	13-6-32	20-7-33	10-0-34	13-8-35	5-5-36.	
Remarks	This year poor char- acter.	This year poor char- acter.							

Table 12.—SPINNING TEST RESULTS FOR DHOLLERAS COTTON.

36

Sample No.	Cotton.	Season.	Date of Spinning.	WASTE PERCENTAGES.				RING FRAME PARTICULARS.*				YARN TEST RESULTS.										TEMPERATURE AFTER SPINNING (°F.).		RELATIVE HUMIDITY (%).	
				Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss.†	Yarn Breakages per 100 spindles per hour.	Front Roller Speed R.P.M.	Spindle Speed R.P.M.	Draft.	Turns per Inch.	LEA.			BALISTIC.			Evenness Class.	Neps per yard.	Turns per inch Actual.	Spinning Room.	Spinning Room.		Testing Room.
													Counts Nominal.	Weight of Sample (lbs.).	Counts Actual.	Strength (lbs.)	Count-Strength Product.	Counts Actual.								Work of Rupture (inch-lb.).	Count-Work Product.
724	Dholleras	1029-30	7-5-30	10.0	10.0	0.7	25.5	50	160	..	6.76	17.98	10.8	48.9	968	10.8	88.8	1719	4	3.0	17.1	90	64	64	
724	(Fin.)	1029-30	7-5-30	..	..	..	..	10	172	..	6.76	20.23	19.5	57.3	1117	19.5	04.27	1846	5	3.5	10.1	90	65	64
725	Dholleras	1029-30	7-5-30	14.1	0.0	0.9	22.5	70	160	..	6.70	17.08	20.3	41.3	838	20.4	88.2	1667	5	2.5	17.2	90	65	64	
725	(Superfine)	1029-30	7-5-30	..	..	..	..	45	172	..	6.70	20.23	20.0	53.8	1070	20.2	87.0	1767	5	3.7	19.3	90	05	08
1120	Dholleras.	1030-31	24-7-31	14.2	11.8	0.0	24.8	40	168	8800	5.78	15.97	15.8	76.4	1207	16.3	139.0	2103	3	4.7	15.5	86	78	70	
1120	Dholleras.	1030-31	23-7-31	..	..	..	..	110	170	8850	6.10	17.98	19.5	55.0	1072	10.9	102.8	2046	4	5.2	17.1	88	75	81
1126	Dholleras.	1030-31	24-7-31	..	..	..	..	70	187	10760	6.25	20.23	10.9	62.1	1236	10.8	110.2	2182	4	4.7	19.4	87	76	84
1368	Dholleras.	1031-32	21-6-32	13.6	8.1	0.6	21.1	7	190	7750	5.00	14.98	13.6	95.0	1292	14.0	170.0	2380	3	0.8	14.4	89	60	70	
1368	Dholleras.	1031-32	21-6-32	..	..	..	..	30	190	8300	5.89	15.97	10.0	73.3	1173	18.3	127.4	2077	3	0.5	15.3	90	69	74
1368	Dholleras.	1031-32	21-6-32	..	..	..	..	52	174	8700	5.71	17.98	19.4	58.4	1183	19.2	108.5	2047	4	0.8	17.2	90	66	76
1880	Dholleras.	1032-33	22-8-33	12.2	11.0	0.4	22.2	51	198	8250	5.21	14.98	14.0	84.4	1182	13.8	189.0	2008	3	0.5	14.0	89	66	09	
1890	Dholleras.	1032-33	23-8-33	..	..	..	..	55	184	8200	5.60	15.97	15.8	72.6	1147	15.7	161.4	2534	4	1.0	15.4	88	71	71
2357	Dholleras.	1033-34	20-6-34	18.0	11.3	0.3	28.0	30	192	8250	5.11	15.97	16.1	79.4	1270	15.0	168.4	2510	3	1.5	15.5	86	78	80	
2367	Dholleras.	1033-34	28-6-34	..	..	..	..	42	175	8550	5.38	17.98	19.0	60.2	1198	20.1	114.8	2307	4	1.8	17.3	86	80	83
2367	Dholleras.	1033-34	28-6-34	..	..	..	..	52	188	9300	5.50	19.26	20.0	62.3	1262	20.5	110.4	2263	4	2.0	18.5	85	80	80
2830	Dholleras.	1034-35	28-8-35	13.8	13.3	0.6	25.6	7	198	7650	5.25	13.92	12.3	100.0	1237	12.2	212.4	2501	3	1.0	13.3	87	71	82	
2830	Dholleras.	1034-35	27-8-35	..	..	..	..	67	198	8850	5.33	15.97	15.1	76.6	1167	15.3	168.8	2430	3	0.8	15.1	87	71	84
2830	Dholleras.	1034-35	27-8-35	..	..	..	..	64	180	9350	5.71	19.26	20.2	51.7	1044	20.1	105.4	2219	4	1.0	18.5	87	70	72
3231	Dholleras.	1035-36	16-6-36	8.9	8.2	0.2	16.5	7	194	7350	5.21	13.92	12.7	97.4	1237	12.3	207.2	2549	3	0.8	13.5	88	00	74	
3231	Dholleras.	1035-36	16-6-36	..	..	..	..	24	192	8550	5.33	15.97	15.7	75.1	1179	16.0	162.0	2502	4	1.0	15.4	80	68	76

* Diameter of ring frame front roller— $\frac{1}{2}$ ". Diameter of ring— $\frac{1}{16}$ ".

† It is to be noted that the total loss is for a small sample weighing 10 lbs. or thereabout; for bulk sample spun under mill conditions it would be less than shown here.

13.—KALAGIN COTTON.

These samples have been very kindly supplied by the East India Cotton Association, after inspection and approval by their Standards Committee, in accordance with an arrangement made with the Association to supply to the Technological Laboratory, for testing, samples of fair average cotton of the commercial crop.

Sample No.	Cotton.	Place.	Season.
757	Kalagin	Manavadar	1929-30
1155	"	"	1930-31
1431	"	Porbunder	1931-32
1888	"	"	1932-33
2358	"	"	1933-34
2771	"	"	1934-35
3327	"	Manavadar	1935-36

I. SPINNING TESTS.

1. Treatment :—

(a) *Blow-room*.—Upto 1933-34 :—Porcupine Crighton (twice), Hopper, Scutcher (3 times). 1934-35 and 1935-36 :—Hopper bale opener, Horizontal cleaner, Crighton (once), Gridded dust-trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).

(b) *Card-room*.—Upto 1933-34 :—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.
1934-35 and 1935-36 :—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) Cotton :—

	KALAGIN.						
	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Colour ..	Dull creamy white; fairly bright.	Creamy white.	White to creamy-white	Creamy white; brightish.	Creamy white; fairly bright.	Creamy white.	White to creamy-white; brightish.
Cleanliness ..	Very leafy indeed.	Very leafy	Very leafy	Very leafy	Very leafy; noticeably stained.	Very leafy	Leafy.
Feel ..	..	Good-bodied.	..	Good ..	Good soft ..	Good ..	Good smooth.
Ginning & Neppiness ..	Fairly well-ginned.	A trifle knotted.	A trifle knotted and nepped.	..	Well-ginned.	Fairly well-ginned.	Well-ginned.
Seeds ..	2.5% unginned.	3.5% ginned and unginned	Too many cut seeds besides 3.75% mainly unginned.	2.1% partly ginned and unginned.	2.35% clean and unginned	Contains a good amount of partly ginned and full clean seeds.	..
Card Sliver ..	A little leafy	A trifle leafy	Leafy	Leafy	Leafy	Leafy	Leafy.
Card Web ..	..	Even and nepp-free.	Fairly good	Good	Full	Full	Good.
Weight of 10 flat strips.	16.9 grams	20.5 grams	23.8 grams	22.4 grams	32.0 grams	36.0 grams	18.7 grams.
Remarks ..	Licker-in No. 1 all trash; a fair amount of leaf shed over beam and ring rails.	Fully pressed.	..	..	..	..	..

(b) Yarn :—

	KALAGIN.						
	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Cleanliness ..	Fairly leafy	A little leafy	A little leafy	Leafy	Very leafy	Leafy	Leafy.
Evenness ..	Fairly even	Fairly even	Even	Fairly even	Somewhat uneven.	Even	Fairly even.
Neppiness ..	Free of nep	Fairly free of nep.	Almost free of nep.	Free of nep	Slightly neppy.	..	A trifle neppy.
Slubbiness ..	..	..	..	..	..	A little slubby.	..

3. *Spinning Test Details and Results*.—See Table 13 on page 39.

II.—REPORT OF THE STANDARDS COMMITTEE FOR KALAGIN COTTON.

KALAGIN.							
	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Contract valued under ..	F. G. M. G. Broach.	F. G. M. G. Broach No. 2.	F. G. M. G. Broach No. 2.	F. G. M. G. Broach No. 2, July/Aug. 1933 delivery.	F. G. M. G. Broach H. C. No. 2, July/Aug. 1934.	F. G. M. G. Broach H. C. No. 2, July/Aug. 1935 delivery.	F. G. M. G. Broach Hedge Con- tract No. 2 July/Aug. 1936 delivery.
Class ..	Fine.	Fine.	Fully good.	Fully good.	Fully good.	Fine.	Superfine.
Colour ..	Very slight blue.	Grayish white.	Bluish white.	Grayish white.	Gray.	Dullish white.	White.
Staple Length ..	$\frac{3}{4}$ inch.	$\frac{3}{4}$ inch.	$\frac{3}{4}$ inch.	Full $\frac{3}{4}$ inch.	$\frac{7}{8}$ inch.	$\frac{3}{4}$ inch.	$\frac{3}{4}$ inch.
Staple Strength ..	Good.	Weak.	Fair.	Good.	Good.	Weak.	Weak.
Regularity ..	Regular.	Irregular.	Regular.	Regular.	Slightly irregular.	Irregular.	Fairly regular.
Value above or below contract rate ..	Rs. 10 on.	Rs. 5 on.	Rs. 3 off.	Rs. 9 off.	Rs. 1 off.	Rs. 8 on.	Rs. 5 on.
Basis ..	Rs. 242.	Rs. 102.	Rs. 210.	F. G. M. G. Broach No. 2, July/ Aug. 1933 delivery, Rs. 207.	F. G. M. G. Broach H. C. No. 2, July/Aug. 1934 delivery, Rs. 208.	F. G. M. G. Broach H. Contract No. 2, July/Aug. 1935 delivery, Rs. 220.	F. G. M. G. Broach Hedge Con- tract No. 2 July/ Aug. 1936 delivery, Rs. 258.
Date of valuation ..	8-8-30.	10-8-31.	17-8-32.	26-7-33.	10-8-34.	2-7-35.	8-8-36.
Remarks

Table 13.—SPINNING TEST RESULTS FOR KALAGIN COTTON.

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Sample No.	Cotton.	Season.	Date of Spinning.	Counts Nominal.	Weight of Sample lbs.	WASTE PERCENTAGES.				RING FRAME PARTICULARS.*				YARN TEST RESULTS.										TEMPERATURE AVERAGE (°F.).	RELATIVE HUMIDITY (%)				
						Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss.†	Yarn Breakages per 100 spindles per hour.	Front Roller Speed R.P.M.	Spindle speed R.P.M.	Draft.	Turns per inch.	L.S.A.			BALISTIC.				Evenness Class.	Neps per yard.			Turns per inch Actual.	Spinning Room.	Spinning Room.	Testing Room.
															Counts Actual.	Strength (lbs.)	Count-Strength Product.	Counts Actual.	Work of Rupture (inch-lb.)	Count-Work Product.									
727	Kalagin	1929-30	14-0-30	20A	10	18.3	10.5	0.0	27.3	10	106	..	4.30	17.93	19.7	73.8	1454	20.2	112.8	2270	3	1.5	17.2	90	08	70			
727	Kalagin	1929-30	14-0-30	24		..	..	..	..	40	170	..	5.35	19.73	23.8	55.5	1321	24.4	80.2	1057	5	2.0	10.0	90	08	09
1155	Kalagin	1930-31	14-0-31	20A	10	15.3	12.5	0.0	20.4	74	104	8100	5.83	17.98	20.3	51.9	1054	20.4	104.4	2180	4	1.7	17.2	85	78	80			
1155	Kalagin	1930-31	14-0-31	20C		..	..	..	..	120	190	10850	5.56	20.23	19.8	67.1	1329	19.7	114.0	2240	4	2.0	10.4	87	74	81
1431	Kalagin	1931-32	23-0-32	20A	0	22.0	10.2	0.8	35.2	143	106	8300	5.43	17.98	20.2	53.7	1086	20.3	102.0	2083	3	1.2	17.2	90	70	71			
1431	Kalagin	1931-32	23-0-32	20C		..	..	..	..	211	100	10600	5.43	20.23	20.0	63.7	1274	19.7	105.0	2147	3	1.0	10.3	91	08	71
1859	Kalagin	1932-33	23-0-33	16	10	18.3	14.7	0.3	30.5	24	132	8150	5.43	15.97	16.1	70.8	1230	16.4	138.0	2279	4	1.0	15.2	88	70	70			
1859	Kalagin	1932-33	23-0-33	20A		..	..	..	..	83	103	8350	5.43	17.98	19.7	61.7	1215	19.9	109.8	2185	5	1.2	10.9	87	73	08
2353	Kalagin	1933-34	30-0-34	14	10	18.8	19.8	0.0	35.2	100	7700	5.11	14.98	14.0	78.2	1095	13.7	170.2	2382	4	1.8	14.4	86	79	80				
2353	Kalagin	1933-34	25-0-34	10		..	..	..	..	139	7800	5.38	15.97	16.1	58.0	043	10.3	121.0	1082	5	1.8	15.1	86	80	82	
2358	Kalagin	1933-34	25-0-34	20B		..	..	..	..	146	180	8330	5.80	10.20	20.3	47.3	060	20.4	98.8	2010	5	2.0	18.1	85	80	80
2771	Kalagin	1934-35	19-7-35	14	10	16.0	19.8	0.2	32.6	22	210	8900	5.11	14.98	13.8	105.1	1450	13.7	201.2	2750	3	2.2	14.4	84	70	77			
2771	Kalagin	1934-35	20-7-35	10		..	..	..	..	12	198	8850	5.95	15.97	10.3	81.0	1335	16.0	102.2	2595	3	2.5	15.0	83	77	73
2771	Kalagin	1934-35	18-7-35	20B		..	..	..	..	21	182	9400	3.10	19.20	20.5	61.5	1291	20.5	114.8	2353	1	2.5	18.5	85	75	78
3257	Kalagin	1935-36	22-8-36	14	10	10.0	12.8	0.2	22.3	0	202	8350	5.31	14.98	14.3	102.7	1400	14.1	212.8	3000	4	1.5	14.5	85	77	60			
3257	Kalagin	1935-36	22-8-36	10		..	..	..	..	0	184	8450	0.92	15.97	16.0	87.7	1403	10.0	174.0	2704	4	1.8	15.3	85	75	69
3257	Kalagin	1935-36	21-8-36	20B		..	..	..	..	21	194	10100	0.97	10.20	20.0	72.8	1453	19.9	122.2	2492	4	2.0	18.4	80	73	70

• Diameter of the frame 6 1/2 inches.

* Diameter of ring frame front roller— $\frac{1}{8}$ ". Diameter of rings— $\frac{1}{16}$ ".

† It is to be noted that the total loss is for a small sample weighing 10 lb. or thereabout; for bulk sample spun under mill conditions it would be less than shown here.

14.—KADI-VIRAMGAM COTTON.

These samples have been very kindly supplied by the East India Cotton Association, after inspection and approval by their Standards Committee, in accordance with an arrangement made with the Association to supply to the Technological Laboratory, for testing, samples of fair average cotton of the commercial crop.

Sample No.	Cotton.	Place.	Season.
727	Kadi-Viramgam	Kadi ..	1929-30.
1161	"	" ..	1930-31.
1430	"	Jotana ..	1931-32.
1887	"	Kadi ..	1932-33.
2459	"	Viramgam.	1933-34.
3326	"	"	1935-36.

I. SPINNING TESTS.

1. Treatment :—

- (a) *Blow-room*.—Upto 1933-34 :—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).
1935-36 :—Hopper bale opener, Horizontal cleaner, Crighton (once), Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).
- (b) *Card-room*.—Upto 1933-34 :—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.
1935-36—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) Cotton :—

		KADI-VIRAMGAM.					
		1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1935-36.
Colour		Creamy to creamy-white.	White to creamy-white.	White to creamy-white.	Creamy-white; brightish.	White to creamy-white.	White to creamy-white; brightish.
Cleanliness		Leafy	Leafy; slightly stained.	Leafy	Very leafy ..	Slightly stained; leafy.	A little stained; leafy.
Feel .. .. .		.. .. .	Moderately good.	Good	Good	Good	Good.
Ginning and neppiness.		.. .. .	Well-ginned ..	.. .. .	Well-ginned ..	Well-ginned ..	A trifle knotted.
Seeds		Far too much cut seed.	1.25% seeds ..	Considerable number of cut besides 1.1% ginned and unginned.	1.2% unginned.	1.72% seeds ..	.. .. .
Card sliver		Clean	Fairly clean ..	Clean	Almost clean ..	A little leafy ..	A little leafy.
Card web		Clear	Even and nep-free.	Fairly good ..	Good	Good	Fairly good.
Weight of 10 flat strips.		16.2 grams ..	17.8 grams ..	17.8 grams ..	22.6 grams ..	20.7 grams ..	17.7 grams.
Remarks		Fairly well-watered at the time of pressing.	Fully-pressed.	.. .. .	Well-watered.	.. .. .	.. .. .

(b) Yarn :—

		KADI-VIRAMGAM.					
		1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1935-36.
Cleanliness		Clean	Fairly clean ..	Clean	A trifle leafy ..	Clean	Almost clean.
Evenness		Even	Fairly even ..	Fairly even ..	Fairly even ..	Fairly even ..	Fairly even.
Neppiness		A little neppy.	Somewhat neppy.	Fairly nep-free.	Free of nep. ..	Fairly neppy ..	Fairly free of nep.
Slubbiness		Slubby .. ..	.. .. .	.. .. .	Occasional slub.	.. .. .	.. .. .

3. Spinning Test Details and Results :—See Table 14 on page 42.

IL--REPORT OF THE STANDARDS COMMITTEE ON KADI-VIRAMGAM.

KADI-VIRAMGAM.						
	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1935-36.
Contract valued under	F. G. M. G. Branch	F. G. M. G. Branch No. 2.	F. G. M. G. Branch No. 2.	F. G. M. G. Branch No. 2.	F. G. M. G. Branch Hedge Contract No. 2.	F. G. M. G. Branch Hedge Contract No. 2.
Class	Superfine ..	Striot fine ..	Fine ..	Fine to superfine ..	Fully good to fine ..	Fine to superfine ..
Colour	Silvery ..	Creamy-white ..	White ..	Creamy-white ..	Dull-white ..	White ..
Staple Length	7/8 inch ..	Barely 7/8 inch ..	Full 3/4 inch ..	5/8 inch ..	Full 3/4 inch ..	3/4 inch ..
Staple Strength	Fair ..	Fair ..	Fair ..	Fair ..	Fair ..	Moderate ..
Regularity	Fair ..	Irregular ..	Irregular ..	Irregular ..	Fair ..	Fairly regular ..
Value above or below contract rate ..	Rs. 7 on ..	Rs. 8 on ..	Rs. 4 on ..	Rs. 3 off ..	Rs. 3 on ..	Rs. 2 on ..
Basis	Rs. 255 ..	Rs. 143 ..	Rs. 219 ..	F. G. M. G. Branch No. 2.	F. G. M. G. Branch H. C. No. 2.	F. G. M. G. Branch Hedge Contract No. 2.
Date of Valuation	29-4-30 ..	25-8-31 ..	17-8-32 ..	20-7-33 ..	13-8-34 ..	8-8-36 ..
Remarks	This year poor character.

Table 14—SPINNING TEST RESULTS FOR KADL-VIRAMGAM COTTON.

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Table 14—SPINNING TEST RESULTS FOR KADI-VIRANGAM COTTON.																																				
1	2	3	4	5	6	7	8	9	10	11	RING FRAME PARTICULARS.*						YARN TEST RESULTS.						TEMPERATURE (°F.).	RELATIVE HUMIDITY (%).												
											WASTE PERCENTAGES.				Weight of Samples (lbs.).		Counts Nominal.	Date of Spinning.	Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss.†				Yarn Breakages per 100 spindles per hour.	Front Roller Speed R.P.M.	Spindle Speed R.P.M.	Draft.	Turns per Inch.	LGA.			BALISTING.		
											Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss.																	Counts Actual.	Strength (lbs.).	Count Strength	Counts Actual.	W or R of (each-10.).	Count Work Product.
727	Kadi-Virangam.	1929-30	8-8-30	20A	10	12.7	9.8	0.7	21.8	35	163	..	0.25	17.98	10.1	48.4	924	19.5	88.8	1084	4	5.2	17.2	01	64	04										
727	Kadi-Virangam.	1929-30	8-8-30	20C	..	..	..	..	..	60	170	..	0.25	20.23	10.1	58.2	1112	19.3	90.2	1741	5	3.5	10.2	02	04	83					
1101	Kadi-Virangam.	1930-31	1-4-31	20A	10	14.1	10.2	0.6	23.3	40	184	8900	6.25	17.98	20.2	00.0	1284	20.4	105.4	2150	4	3.0	17.1	85	74	77										
1161	Kadi-Virangam.	1930-31	1-4-31	24	..	..	..	..	..	88	150	8500	6.79	19.73	23.0	46.2	1090	23.4	03.0	2176	4	3.5	16.8	85	72	81					
1430	Kadi-Virangam.	1931-32	22-8-32	20A	9	17.7	12.3	0.6	28.3	21	183	8900	5.98	17.98	19.5	06.2	1291	19.4	116.2	2254	4	1.5	17.2	80	70	71										
1430	Kadi-Virangam.	1931-32	23-8-32	24	..	..	..	..	..	47	154	8450	5.95	19.73	23.5	50.3	1182	23.8	03.2	2318	5	2.8	18.0	88	70	70					
1887	Kadi-Virangam.	1932-33	23-8-33	16	10	11.0	13.4	0.6	24.1	224	170	7500	5.43	15.97	15.8	55.5	877	15.3	133.8	2044	4	0.8	15.1	87	75	60										
1887	Kadi-Virangam.	1932-33	22-8-33	20A	..	..	..	..	..	218	168	8300	5.55	17.98	10.8	35.3	690	19.0	94.4	1879	4	1.0	17.3	87	87	89					
2459	Kadi-Virangam.	1933-34	21-8-34	20A	10	17.8	14.7	0.6	30.3	42	198	9600	5.33	17.98	20.4	03.4	1203	20.8	112.8	2346	3	4.5	17.1	85	77	78										
2459	Kadi-Virangam.	1933-34	22-8-34	24	..	..	..	..	..	36	179	9500	5.33	19.73	23.7	54.1	1282	24.1	98.0	2362	4	4.0	18.8	84	77	79					
2459	Kadi-Virangam.	1933-34	22-8-34	30	..	..	..	..	..	122	155	9000	5.67	23.11	29.7	37.2	1105	20.8	76.8	2289	5	4.0	22.1	84	77	78					
3326	Kadi-Virangam.	1935-36	21-8-36	14	10	10.3	12.2	0.4	21.6	22	202	8400	5.10	14.98	13.0	85.3	1180	14.1	170.2	2400	4	1.8	14.5	80	71	72										
3326	Kadi-Virangam.	1935-36	24-8-36	18	..	..	..	..	..	12	195	8400	5.31	15.97	10.4	01.0	1010	10.3	130.8	2132	4	2.0	15.4	86	71	70					
3326	Kadi-Virangam.	1935-36	21-8-36	20B	..	..	..	..	..	53	190	10100	5.31	19.26	20.2	59.0	1192	20.2	104.8	2117	5	1.5	18.0	85	75	70					

* The ring frame front-roller used in the spinning of these yarns has a diameter of $\frac{1}{4}$ inch. The diameter of rings— $\frac{1}{16}$ inch.

† It is to be noted that the total loss is for a small sample weighing 10 lbs. or thereabout; for bulk sample spun under mill conditions it would be less than shown here.

15.—WESTERNS JAVARIA COTTON.

These samples have been very kindly supplied by the East India Cotton Association, after inspection and approval by their Standards Committee, in accordance with an arrangement made with the Association to supply to the Technological Laboratory, for testing, samples of fair average cotton of the commercial crop.

Sample No.	Cotton.	Place.	Season.
795	Westerns Javaria	Bellary	1929-30.
1127	Westerns "	Adoni.	1930-31.
1370	Westerns "	Adoni.	1931-32.
1889	Westerns "	Raichur.	1932-33.
2356	Westerns "	Adoni.	1933-34.
2838	Westerns "	Raichur.	1934-35.
3398	Westerns "	Adoni.	1935-36.

I. SPINNING TESTS.

1. Treatment :—

(a) *Blow-room*.—Upto 1933-34 (inclusive):—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).

1934-35 and 1935-36 :—Hopper bale opener, Horizontal cleaner, Crighton (once), Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).

(b) *Card-room*.—Upto 1933-34 (inclusive):—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. I.

1934-35 and 1935-36 :—As above, but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. I possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) Cotton :—

	WESTERNS.						
	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Colour	Creamy; fairly bright.	Creamy-white.	Creamy-white.	Creamy-white.	Creamy-white.	Dull creamy.	Creamy-white; dullish.
Cleanliness	Very leafy.	Leafy; rather badly stained.	Leafy; slightly stained.	Much stained; leafy.	Very leafy.	Badly stained; leafy.	Leafy; slightly stained.
Feel	Good.	Fairly good but softish.	Softish.	Poorish.	Good.	Good.	Good.
Ginning and neppiness .. ..	..	Fairly well-ginned.	Well-ginned.	S o m e w h a t knotted.	Well-ginned.	S o m e w h a t knotted.	A trifle knotted.
Seeds	1.72% full clean.	..	0.7% ginned and unginned.	..	1% full clean.	..	..
Card Sliver .. ..	..	A trifle leafy.	A little leafy.	Almost clean.	Fairly leafy.	Fairly clean.	Almost clean.
Card Web .. .. .	..	Very slightly neppy.	Good.	Good.	Good even.	A little neppy.	Even; nepp-free.
Weight of 10 flat strips. .	21.2 grams.	17.6 grams.	14.3 grams.	18.4 grams.	23.7 grams.	22.5 grams.	14.7 grams.
Remarks	Locker-in fly No. 1 all trash	..	..	..	..	..	..

(b) Yarn :—

	WESTERNS.						
	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Cleanliness	Fairly clean.	Fairly clean.	Fairly clean.	Clean.	A little leafy.	Almost clean.	Almost clean.
Evenness	Fairly unoven.	Fairly oven.	Even.	Fairly oven.	Fairly even.	Even.	Fairly even.
Neppiness	Very neppy.	Neppy.	A little neppy.	Fairly free of nepp.	S o m e w h a t neppy.	Fairly free of nepp.	S o m e w h a t neppy.
Slubbiness .. .. .	..	..	..	..	Slubby.	Slightly slubby.	..

3. Spinning Test Details and Results :—See Table 15 on page 45.

II.—REPORT OF THE STANDARDS COMMITTEE FOR WESTERNS.

WESTERNS.									
		1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.	
Contract valued under	.. ..	F.G.M.G. Branch.	F.G.M.G. Branch No. 2.	F.G. M. G. Branch No. 2.	F. G. M. G. Branch No. 2, July/August 1933 delivery.	F. G. M. G. Branch H. C. No. 2, July/August 1934.	F. G. M. G. Branch Hedge Contract No. 2, July/August 1935 delivery.	F. G. M. G. Branch H. C. No. 2, April/May 1937 delivery.	
Class .. ..	.. ..	.. Fine.	Superfine.	Superfine.	Good to Fully good.	Fully good.	Fine.	Fine.	
Colour .. ..	.. ..	.. Brownish.	Yellowish.	Brownish-dull white.	Brownish.	Brownish white.	Brownish.	Creamy brown.	
Staple Length .. ..	.. ..	.. 13/16 inch.	Full 3/4 inch.	3/4 inch.	5/8 inch.	3/4 inch.	13/16 inch.	11/16 inch.	
Staple Strength .. ..	.. ..	.. Good.	Fairly good.	Weak.	Fair.	Fair.	Moderate.	Poor.	
Regularity .. ..	.. ..	.. Irregular.	Irregular.	Irregular.	Irregular.	Irregular.	Fair.	Irregular.	
Valued above or below Contract rate	.. ..	.. Rs. 25 on.	Rs. 10 on.	Rs. 8 on.	Rs. 5 off.	Par.	Rs. 30 on.	Rs. 10 off.	
Rate .. ..	.. ..	.. F.G.M.G. Branch.	Rs. 177.	Rs. 152.	F.G.M.G. Branch No. 2, July/August 1933 delivery, Rs. 207.	F. G. M. G. Branch H. C. No. 2, July/August 1934 delivery, Rs. 208.	F. G. M. G. Branch Hedge Contract No. 2, July/August 1935 delivery, Rs. 224.	F. G. M. G. Branch H. C. No. 2, April/May 1937 delivery, Rs. 219.	
Date of Valuation .. ..	.. ..	.. 10-7-30.	11-7-31.	13-6-32.	28-7-33.	19-6-34.	20-8-35.	5-10-36.	
Remarks .. ..	.. ..	.. ..	Probably mixed with Mangrai.	.. ..	.. ..	.. ..	.. ..	.. ..

Table 15.—SPINNING TEST RESULTS FOR WESTERNS.

Sample No.	Cotton.	Season.	Date of Spinning.	Counts Nominal.	Weight of Sample, lbs.	WASTE PERCENTAGES.				RING FRAME PARTICULARS.*					YARN TEST RESULTS.										TEMPERATURE, (°F.).	RELATIVE HUMIDITY, (%).
						Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss.†	Yarn Breakages per 100 spindles per hour.	Front Roller speed R.P.M.	Spindle speed R.P.M.	Draft.	Turns per inch.	LEA.			BALANCE.			Twists per yard.	Turns per inch Actual.				
															Counts Actual.	Strength (lbs.)	Count-Strength Product.	Counts Actual.	Work of Rupture (inch-lb.).	Count-Work Product.						
705	Westerns ..	1929-30	24-7-30	20A	10	13.0	11.9	0.7	24.7	63	176	..	5.32	17.98	19.6	42.1	963	20.0	91.2	1834	4	10.7	17.0	86	78	72
706	Westerns ..	1929-30	24-7-30	20B		..	..	..	..	60	102	..	5.32	20.23	19.3	60.7	1237	19.3	107.3	2031	4	11.5	19.3	87	71	70
1127	Westerns ..	1930-31	24-7-31	20A	10	10.8	10.8	0.4	20.7	30	100	0450	5.12	17.98	20.1	66.6	1339	20.0	115.0	2312	4	9.0	10.9	88	75	82
1127	Westerns ..	1930-31	25-7-31	24		..	..	..	..	40	150	8200	6.16	10.73	23.7	52.0	1212	21.3	93.0	2230	5	8.5	18.7	87	76	80
1370	Westerns ..	1931-32	23-6-32	20A	10	11.2	9.0	0.5	10.7	36	104	0500	5.67	17.03	10.4	77.7	1207	16.7	120.4	2190	3	2.5	17.3	80	00	78
1370	Westerns ..	1931-32	23-6-32	24		..	..	..	..	8	176	6300	6.63	10.73	23.1	52.6	1434	23.2	101.2	2343	4	3.0	19.3	86	72	78
1889	Westerns ..	1932-33	1-8-33	10	10	15.0	10.8	0.4	24.6	73	181	8000	6.33	15.97	16.9	71.4	1183	16.1	122.0	2125	4	2.0	16.2	80	68	67
1889	Westerns ..	1932-33	31-8-33	20A		..	..	..	..	161	178	8800	6.53	17.98	10.9	55.1	1102	20.3	103.0	2091	5	2.0	17.2	87	69	67
2356	Westerns ..	1933-34	20-6-34	16	10	14.1	13.0	0.5	25.0	17	102	8250	5.63	15.97	10.0	71.3	1141	15.8	133.0	2111	4	2.6	16.4	80	78	81
2356	Westerns ..	1933-34	28-6-34	20A		..	..	..	..	169	175	8350	6.38	17.03	12.8	55.3	1093	19.9	102.0	2012	5	2.0	17.3	86	80	85
2356	Westerns ..	1933-34	28-6-34	20B		..	..	..	..	114	188	9300	5.93	19.20	20.0	60.2	1204	19.7	107.0	2103	4	2.5	18.4	85	80	80
2838	Westerns ..	1934-35	31-8-36	10	10	10.8	12.7	0.2	22.3	18	198	8800	6.80	15.37	13.9	107.2	1701	10.0	183.0	2038	3	1.8	15.4	85	75	74
2838	Westerns ..	1934-35	30-8-36	20A		..	..	..	..	26	170	8150	6.33	17.93	20.1	75.2	1312	20.1	120.2	2397	3	2.2	17.0	80	75	74
2838	Westerns ..	1934-35	31-8-36	20B		..	..	..	..	10	185	9000	6.07	19.26	20.5	79.2	1624	20.0	127.8	2629	3	2.0	18.3	85	70	72
3308	Westerns ..	1935-36	14-10-36	16	10	12.5	10.5	0.2	21.3	0	104	8900	6.71	16.37	10.5	80.0	1330	10.5	136.2	2217	3	3.5	15.4	80	00	01
3308	Westerns ..	1935-36	14-10-36	20A		..	..	..	..	5	181	9000	6.83	17.98	19.7	68.0	1300	10.9	111.4	2206	4	2.5	17.1	83	70	61
3308	Westerns ..	1935-36	14-10-36	20B		..	..	..	..	6	107	10360	6.05	19.20	20.3	72.2	1160	20.0	100.2	2250	4	2.5	18.7	87	69	63

* Diameter of ring frame front roller—7/8". Diameter of ring—1.5/8".

† It is to be noted that the total loss is for a small sample weighing 10 lbs.; for bulk sample spun under mill conditions it would be less than shown here.

16.—FARM WESTERNS COTTON.

These samples have been very kindly supplied by the East India Cotton Association, after inspection and approval by their Standards Committee, in accordance with an arrangement made with the Association to supply to the Technological Laboratory, for testing, samples of fair average cotton of the commercial crop.

Sample No.	Cotton.	Place.	Season.
758	Farm Westerns ..	.. Guntakal ..	1929-30
1128	" ..	.. Adoni ..	1930-31
1371	" ..	.. Bellary ..	1931-32
1890	" ..	.. Adoni ..	1932-33
2297	" ..	.. Bellary ..	1933-34
2772	" ..	.. Adoni ..	1934-35
3323	" ..	.. Raichur ..	1935-36

I.—SPINNING TESTS.

1. Treatment :—

(a) *Blow-room*.—Upto 1933-34 :—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).

1934-35 and 1935-36 :—Hopper bale opener, Horizontal cleaner, Crighton, Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).

(b) *Card-room*.—Upto 1933-34 :—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.

1934-35 and 1935-36 :—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) *Cotton* :—

FARM WESTERNS.								
	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.	
Colour ..	.. Creamy ..	.. Creamy white.	.. Creamy-white ..	.. Creamy-white ..	.. White to creamy-white; fairly bright.	.. Creamy-white; fairly bright.	.. Creamy-white.	
Cleanliness ..	.. Very leafy ..	.. Leafy ..	.. Leafy; a good deal stained.	.. Stained; leafy ..	.. Leafy ..	.. Leafy ..	.. Leafy (fine leaf); stained.	
Feel ..	..	.. Good ..	.. Good softish ..	.. Good ..	.. Good ..	.. Good ..	.. Good ..	
Ginning and neppiness.	.. Fairly well-ginned.	.. Well-ginned ..	.. Well-ginned ..	.. Somewhat knotted.	.. Well-ginned ..	.. Well-ginned ..	.. A little knotted.	
Seeds ..	.. 1.66% ginned and unginned.	..	.. 1.4% ginned and unginned.	..	.. 2.2% unginned and full clean.	.. Contains many full clean.	.. Few.	
Card sliver ..	.. Fairly clean ..	.. Slightly leafy.	.. A little leafy ..	.. Clean ..	.. Fairly clean ..	.. Leafy ..	.. Almost clean.	
Card web ..	..	.. Even and almost nep-free.	.. Good ..	.. Good ..	.. Good even ..	.. Full ..	.. Good.	
Weight of 10 flat strips.	16.4 grams ..	18.7 grams ..	16.0 grams ..	18.5 grams ..	16.3 grams ..	25.1 grams ..	16.1 grams.	
Remarks ..	.. Much leaf shed over beam and ring rails.	.. Fully pressed ..	..	..	..	..	..

(b) *Yarn* :—

FARM WESTERNS.							
	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Cleanliness ..	.. Fairly leafy ..	.. A little leafy ..	.. Fairly clean ..	.. Clean ..	.. Almost clean ..	.. Somewhat leafy.	.. Almost clean.
Evenness ..	.. Even ..	.. Fairly uneven.	.. Even ..	.. Fairly even ..	.. Even ..	.. Fairly even ..	.. Even.
Neppiness ..	.. A little neppy.	.. Neppy ..	.. A little neppy.	.. Almost free of nep.	.. Practically free of nep.	.. Somewhat neppy.	.. Slightly neppy.
Slubbiness ..	..	..	..	..	..	..	..

3. *Spinning Test Details and Results* :—See Table 16 on page 48.

II. REPORT OF THE STANDARDS COMMITTEE FOR FARM WESTERNS COTTON.

FARM WESTERNS.									
		1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.	
Contract valued under	.. ..	F. G. M. G. Branch ..	F. G. M. G. Branch ..	F. G. M. G. Branch ..	F. G. M. G. Branch ..	F. G. M. G. Branch ..	F. G. M. G. Branch ..	F. G. M. G. Branch ..	
		No. 2.	No. 2.	No. 2.	No. 2.	No. 2.	No. 2.	No. 2.	
Class	.. ..	Extra superfine	Extra superfine	Superfine	Fully good to fine	Superfine	Superfine	Fully good to fine.	
Colour	.. ..	White	Creamy-white	Brownish-white	Brownish	Whitish	Creamy-white	Dull white.	
Staple Length	.. ..	$\frac{3}{4}$ inch	Full $\frac{3}{4}$ inch.	$\frac{3}{4}$ inch.	$\frac{3}{4}$ inch.	$\frac{3}{4}$ inch.	$\frac{3}{4}$ inch.	$\frac{3}{4}$ inch.	
Staple Strength	.. ..	Good	Strong	Good	Good	Good	Fairly good	Moderate.	
Regularity	.. ..	Regular	Regular	Regular	Regular	Regular	Regular	Slightly irregular.	
Value above or below contract rate.	.. ..	Rs. 45 on	Rs. 50 on	Rs. 30 on	Rs. 25 on	Rs. 40 on	Rs. 65 on	Rs. 15 off.	
Basis	.. ..	Rs. 242	Rs. 177	Rs. 152	Rs. 152	Rs. 152	Rs. 152	Rs. 152	
Date of valuation	6-8-30	14-7-31	13-6-32	20-7-33	3-5-34	2-7-35	8-8-36.	
Remarks	

Table 16.—SPINNING TEST RESULTS FOR FARM WESTERNS COTTON.

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1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
Sample No.	Cotton.	Season.	Date of Spinning.	Counts Nominal.	Weight of Sample lbs.	WASTE PERCENTAGES.				RING FRAME PARTICULARS.*				YARN TEST RESULTS.				TEMPERATURE HUMIDITY (%).				Spiraling Room.	Spiraling Room.	Spiraling Room.	Spiraling Room.	Spiraling Room.
						Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss.	Yarn Breakages per 100 spindles per hour.	Front Roller Speed M.P.M.	Spindle Speed R.P.M.	Draft.	Turns per inch.	Counts Actual.	Strength (lbs.)	Count-Strength Product.	Counts Actual.	Work (inches-lbs.)	Count-Work Product.	Brevities Class.	Reps per yard.	Turns per inch Actual.	Spiraling Room.	Spiraling Room.	Spiraling Room.
758	Farm Westerns.	1929-30	14-6-30	20	10	13.0	11.1	0.9	23.1	5	100	..	4.90	17.98	19.9	83.8	1642	19.7	121.8	2309	3	2.5	17.1	90	68	70
758	Farm Westerns.	1929-30	14-6-30	24	10	..	..	..	..	44	176	..	5.95	19.73	23.5	91.8	1452	23.6	87.9	2967	4	3.0	10.0	90	68	64
1128	Farm Westerns.	1930-31	24-7-31	20	10	10.3	11.1	0.3	20.5	20	100	9450	5.28	17.98	20.0	84.0	1318	20.9	108.2	2291	4	5.5	17.3	83	75	80
1128	Farm Westerns.	1930-31	25-7-31	24	10	..	..	..	..	27	150	8290	6.10	19.73	23.6	56.5	1393	23.9	98.4	2352	0	0.5	18.8	80	70	85
1371	Farm Westerns.	1931-32	23-6-32	20	10	12.3	8.7	0.5	20.4	16	194	9590	5.44	17.98	19.0	86.0	1703	20.0	130.2	2784	3	3.0	17.4	86	69	77
1371	Farm Westerns.	1931-32	23-6-32	24	10	..	..	..	..	24	175	9590	6.41	19.73	23.9	79.7	1626	23.4	114.6	2682	4	3.0	19.3	80	72	81
1809	Farm Westerns.	1932-33	31-8-33	20	10	13.8	10.5	0.5	24.2	145	178	8300	5.68	17.98	19.8	90.6	1299	29.0	111.2	2521	4	1.5	17.2	87	90	70
1809	Farm Westerns.	1932-33	31-8-33	24	10	..	..	..	..	180	192	8099	5.95	19.73	23.8	45.3	1078	24.0	92.0	2268	4	1.8	19.0	88	79	68
2297	Farm Westerns.	1933-34	22-5-34	20	10	12.2	9.3	0.3	20.0	10	198	9750	5.98	17.98	20.2	88.2	1099	29.1	131.2	2637	3	1.2	17.3	90	63	68
2297	Farm Westerns.	1933-34	22-5-34	24	10	..	..	..	..	0	180	9390	5.33	19.73	23.5	83.8	1617	24.2	106.2	2570	4	1.5	19.1	90	68	70
2297	Farm Westerns.	1933-34	23-5-34	30	10	..	..	..	..	39	150	9590	6.92	21.80	29.1	49.3	1483	30.3	84.8	2569	6	1.5	21.1	83	68	70
2772	Farm Westerns.	1934-35	18-7-35	20	10	9.4	13.1	0.4	21.6	16	198	9750	6.10	17.98	19.9	86.0	1711	29.0	135.0	2700	3	2.2	17.0	86	72	78
2772	Farm Westerns.	1934-35	19-7-35	24	10	..	..	..	..	27	180	9390	5.44	19.73	23.8	90.0	1604	23.4	113.0	2958	4	2.5	18.8	85	78	80
2772	Farm Westerns.	1934-35	19-7-35	30	10	..	..	..	..	53	159	9790	6.86	21.80	29.7	52.2	1498	29.6	89.0	2654	6	1.8	21.0	83	77	81
3323	Farm Westerns.	1935-36	20-8-36	10	10	11.9	9.7	0.3	20.4	18	192	8500	5.65	19.97	15.6	93.8	1493	16.1	155.2	2499	3	2.9	15.2	85	74	75
3323	Farm Westerns.	1935-36	19-8-36	20A	10	..	..	..	..	21	186	9250	6.07	17.98	19.9	69.2	1317	20.4	112.0	2285	4	2.2	17.3	86	72	74
3323	Farm Westerns.	1935-36	19-8-36	20B	10	..	..	..	..	5	190	10000	6.10	19.29	20.0	73.0	1478	20.2	113.0	2505	4	1.2	18.7	86	71	74

* Diameter of ring frame front roller—7/8". Diameter of ring—1/8".

† It is to be noted that the total loss is for a small sample weighing 10 lbs.; for bulk sample spun under mill conditions it would be less than shown here.

17.—KUMPTA COTTON.

These samples have been very kindly supplied by the East India Cotton Association, after inspection and approval by their Standards Committee, in accordance with an arrangement made with the Association to supply to the Technological Laboratory, for testing, samples of fair average cotton of the commercial crop.

Sample No.	Cotton.	Place.	Season.
759	Kumpta	Hubli.	1929-30.
1129	"	"	1930-31.
1369	"	"	1931-32.
1891	"	"	1932-33.
2298	"	Gadag.	1933-34.
2872	"	"	1934-35.
3399	"	Hubli.	1935-36.

I.—SPINNING TESTS.

1. Treatment :—

(a) *Blow-room*.—Upto 1933-34 (inclusive):—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).

1934-35 and 1935-36 :—Hopper bale opener, Horizontal Cleaner, Crighton (once), Gridded dust-trunks, Cage exhaust, Hopper Feeder, Scutcher (3 times).

(b) *Card-room*.—Upto 1933-34 (inclusive):—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.

1934-35 and 1935-36 :—As above, but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) Cotton :—

		KUMPTA.						
		1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Colour	.. ..	Creamy.	Dullish creamy.	Dullish creamy-white.	Dullish creamy-white.	Creamy-white.	Creamy-white.	White to creamy white; dullish
Cleanliness	.. ..	Very leafy.	Leafy.	Leafy.	Very leafy; stained.	Leafy.	Very leafy.	Leafy; slightly stained.
Feel	.. ..	Good.	Moderately good.	..	Good.	Good smooth.	Good.	Good.
Ginning and neppiness		A little nepped and knotted.	..	Well-ginned.	Well-ginned.	A trifle knotted.	Well-ginned.	Well-ginned.
Seeds	.. ..	..	Too much cut and crushed besides 1.1% ginned and unginned.	A few ginned and unginned.	..	1.50% unginned and partly ginned.	..	..
Card Sliver	.. ..	Fairly clean.	Fairly clean.	Clean.	Almost clean.	Fairly leafy.	Clean.	Almost clean.
Card Web	.. ..	..	Even and practically free of nep.	Good.	Even and nep-free.	Good.	Good.	Even; nep-free.
Weight of 10 flat strips		14.7 grams.	16.3 grams.	14.3 grams.	15.2 grams.	16.2 grams.	19.3 grams.	14.3 grams.
Remarks	.. ..	Licker-in No. 1 is mainly leaf.	..	..	..	Fairly well-watered.	..	..

(b) Yarn :—

		KUMPTA.						
		1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Cleanliness	Fairly clean.	Fairly clean.	Almost clean.	Clean.	Fairly clean.	Leafy.	Almost clean.	
Evenness	Even.	Fairly even.	Even.	Fairly even.	Fairly even in the two lower counts.	Even.	Even.	
Neppiness	Fairly free of nep.	Slightly neppy.	A trifle neppy	Free of nep.	A little neppy.	Almost free of nep.	Almost free of nep.	
Stubbliness .. ..	..	..	..	..	A little slubby.	..	..

3. *Spinning Test Details and Results* :—See Table 17 on page 51.

II. REPORT OF THE STANDARDS COMMITTEE FOR KUMPTA COTTON.

KUMETA.							
	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Contracts valued under	F. G. M. G. Broach: No. 2.	F. G. M. G. Broach: No. 2.	F. G. M. G. Broach: No. 2.	F. G. M. G. Broach: No. 2, July/Aug. 1933 delivery.	F. G. M. G. Broach: No. 2, April/May 1934 deli- very.	F. G. M. G. Broach: Hedge Contract No. 2, April/May 1936 delivery.	F. G. M. G. Broach: H. C. No. 2, April/ May 1937 delivery.
Class	Fine.	Fine.	Fine.	Fully good.	Fully good to fine.	Fine.	Fine.
Colour	Very slight red.	Brown yellow.	Brownish white.	Brownish.	Greyish and creamy.	Dull white.	Greyish.
Staple Length	7/8 inch.	Full 7/8 inch.	7/8 inch.	3/4 inch.	Full 3/4 inch.	13/16 inch.	7/8 inch.
Staple Strength	Fair.	Good.	Fair.	Fair.	Good.	Good.	Good.
Regularity	Irregular.	Regular.	Rather irregular	Irregular.	Regular.	Fairly regular.	Irregular.
Value above or below contract rate ..	Rs. 50 on.	Rs. 50 on.	Rs. 25 on.	Rs. 10 on.	Rs. 22 on.	Rs. 50 on.	Rs. 5 on.
Basis	Rs. 242.	Rs. 177.	Rs. 152.	F. G. M. G. Broach: No. 2, July/Aug. 1933 delivery, Rs. 207.	F. G. M. G. Broach: Hedge Contract No. 2, April/May deli- very, Rs. 192.	F. G. M. G. Broach: H. C. No. 2, April/ May 1936 delivery, Rs. 197.	F. G. M. G. Broach: H. C. No. 2, April/ May 1937 delivery, Rs. 219.
Date of Valuation	6-6-30.	14-7-31.	13-6-32.	26-7-33.	11-5-34.	10-9-35.	5-10-36.
Remarks .. ..	..	..	..	..	..	..	..

Table 17.—SPINNING TEST RESULTS FOR KUMPTIA COTTON.

Sample No.	Cotton.	Season.	Date of Spinning	Counts Normal.	Weight of sample lbs.	WASTE PERCENTAGES.				RING FRAME PARTICULARS.*				YARN TEST RESULTS.						TEMPER- ATURE (°F).	RELATIVE HUMIDITY (%).	Testing Room.				
						Blow Room Loss.	Card Room Loss.	Spinning Loss.†	Total Loss.	Yarn Breakages per 100 spindles per hour.	Front Roller Speed H. P. M.	Spindle Speed H. P. M.	Draft.	Turns per Inch.	LEA.		BALLISTIC.						Neeps per Yard.	Turns per Inch Actual.	Spinning Room.	
															Counts Actual.	Strength (lbs.)	Count-Strain Product.	Counts Actual.	Work of rupture (lb.-in.)							Count-Work Product.
750	Kumtia	1929-30	17-6-30	20	10	14.1	10.0	0.6	23.1	10	196	..	4.20	17.93	20.0	80.0	1618	10.8	114.3	2273	3	2.0	17.2	80	63	67
759	Kumtia	1929-30	17-6-30	24	..	..	..	..	..	32	170	..	5.81	19.73	23.8	62.0	1490	21.2	87.8	2304	4	2.0	18.9	90	60	07
1129	Kumtia	1930-31	27-7-31	24	10	14.4	10.3	0.5	23.5	24	180	0600	5.63	19.73	24.0	65.7	1577	21.7	101.0	2411	4	1.7	18.9	85	80	83
1129	Kumtia	1930-31	27-7-31	30B	..	..	..	..	..	42	153	0700	7.06	23.11	29.0	47.7	1412	22.1	82.4	2704	5	3.0	22.2	80	70	85
1369	Kumtia	1931-32	30-6-32	24	10	15.0	9.2	0.6	23.2	42	180	0650	5.77	19.73	22.7	67.2	1525	23.4	67.3	2246	3	1.5	19.1	90	09	73
1369	Kumtia	1931-32	22-6-32	30B	..	..	..	..	..	23	153	9550	7.11	21.86	29.0	49.3	1450	20.5	81.2	2395	4	2.0	22.6	87	70	77
1891	Kumtia	1932-33	30-8-33	24	10	15.0	8.9	0.5	23.5	150	178	0600	5.53	19.73	23.5	53.5	1375	24.1	94.0	2305	4	0.5	18.8	87	70	07
1891	Kumtia	1932-33	31-8-33	30A	..	..	..	..	..	109	150	9000	6.91	21.86	23.0	42.3	1210	20.1	70.4	2224	5	1.0	20.9	80	73	60
2298	Kumtia	1933-34	24-5-34	20	10	14.7	9.7	0.6	23.4	21	193	0650	5.81	17.93	19.8	77.1	1527	20.4	111.4	2273	4	1.2	17.1	88	68	70
2298	Kumtia	1933-34	25-5-34	24	..	..	..	..	..	32	180	9550	5.32	19.73	23.4	63.4	1484	24.1	97.2	2311	5	1.8	19.0	80	60	70
2298	Kumtia	1933-34	25-5-34	30A	..	..	..	..	..	73	154	9100	6.02	21.86	29.8	41.2	1223	30.0	77.2	2302	6	1.5	20.9	89	69	70
2872	Kumtia	1934-35	22-6-35	20	10	10.6	13.8	0.4	23.2	20	197	0700	5.05	17.93	20.4	80.2	1820	20.2	127.2	2569	3	1.2	17.1	86	68	71
2872	Kumtia	1934-35	24-6-35	24	..	..	..	..	..	18	170	0650	5.23	19.73	23.4	74.0	1753	21.3	109.0	2510	3	1.2	10.0	86	60	72
3390	Kumtia	1935-36	16-10-36	20	10	9.4	10.7	0.4	19.1	21	194	0700	6.19	17.93	20.4	85.3	1740	20.1	116.0	2332	3	1.2	17.2	80	71	60
3399	Kumtia	1935-36	16-10-36	24	..	..	..	..	..	10	178	9700	5.55	19.73	23.4	72.3	1692	23.1	105.2	2450	4	1.6	10.1	87	60	60
3390	Kumtia	1935-36	15-10-36	30A	..	..	..	..	..	17	147	9000	0.76	21.86	29.4	62.4	1541	28.7	86.0	2463	4	1.5	21.1	86	01	63

* Diameter of ring frame front roller—1½". Diameter of rings—1½".

† It is to be noted that the total loss is for a small sample weighing 10 lbs.; for bulk sample spun under mill conditions it would be less than shown here.

18.—UPLAND COTTON.

These samples have been very kindly supplied by the East India Cotton Association, after inspection and approval by their Standards Committee, in accordance with an arrangement made with the Association to supply to the Technological Laboratory, for testing, samples of fair average cotton of the commercial crop.

Sample No.	Cotton.	Place.	Season.	Sample No.	Cotton.	Place.	Season.
796	Upland	Gadag	.. 1929-30	2475	Upland	Gadag	.. 1933-34
1158	"	Hubli	.. 1930-31	2829	"	"	.. 1934-35
1396	"	Gadag	.. 1931-32	3325	"	"	.. 1935-36
1884	"	"	.. 1932-33				

I. SPINNING TESTS.

1. Treatment :—

(a) *Blow-room*.—Upto 1933-34 :—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).

1934-35 and 1935-36 :—Hopper bale opener, Horizontal cleaner, Crighton (once), Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).

(b) *Card-room*.—Upto 1933-34 :—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.

1934-35 and 1935-36 :—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) *Cotton* :—

	UPLAND.						
	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Colour	Creamy-white; bright.	Creamy-white.	Creamy-white.	Creamy-white.	Creamy-white.	White to creamy-white.	White to creamy-white.
Cleanliness ..	Leafy	Leafy; slightly stained.	Somewhat leafy.	Leafy	Very leafy ..	Fairly clean ..	Slightly stained. Fairly leafy.
Feel	Good .. ..	..	Good softish ..	Softish	Good	Soft; poorish.	Good.
Ginning and Noppiness.	A little nepped and knotted.	Well-ginned except for slight knottiness.	Well-ginned ..	Somewhat knotted in ginning.	Fairly well-ginned.	Well-ginned ..	A trifle knotted.
Seeds	A fair amount of undeveloped seeds; 0.63% full clean.	0.6% ginned and unginned.	0.5% unginned.	..	..	Some seeds ..	..
Card Sliver ..	..	Almost clean ..	Clean	Clean	Leafy	Clean; soft ..	Clean.
Card Web	A little cloudy and neppy.	Practically free of nep.	Good	Good	Somewhat cloudy.	Slightly neppy.	Good.
Weight of 10 flat strips.	26.8 grams ..	24.2 grams ..	23.7 grams ..	25.7 grams ..	26.4 grams ..	24.1 grams ..	15.8 grams.
Remarks .. ..	..	..	..	..	..	..	..

(b) *Yarn* :—

	UPLAND.						
	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Cleanliness ..	Fairly leafy ..	Almost clean ..	Almost clean ..	Somewhat leafy.	Leafy	Clean	Almost clean.
Evenness	Very neppy ..	Fairly even ..	Fairly even ..	Fairly even ..	Fairly even ..	Fairly even ..	Even.
Neppiness	Fairly even ..	A trifle neppy.	A trifle neppy.	A little neppy.	Somewhat neppy.	A trifle neppy.	Practically free of nep.
Slubbiness .. ..	..	..	..	A trifle slubby.	..	Somewhat slubby.	..

3. *Spinning Test Details and Results* :—See Table 18 on page 54.

III. REPORT OF THE STANDARDS COMMITTEE FOR UPLAND COTTON.

		UPLAND.						
		1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Contract valued under	.. ..	F. G. M. G. Branch .. No. 2.	F. G. M. G. Branch .. No. 2.	F. G. M. G. Branch .. No. 2.	F. G. M. G. Branch .. No. 2, July-Aug. 1933 delivery.	F. G. M. G. Branch .. Hedge Contract No. 2, April-May 1935 delivery.	F. G. M. G. Branch .. Hedge Contract No. 2, July-Aug. 1935 delivery.	F. G. M. G. Hedge Contract No. 2, July- Aug. 1936 delivery.
Class .. ..	.. ..	Strict fine ..	Fine ..	Fine ..	Fully good to fine ..	Fine ..	Superfine ..	Superfine.
Colour .. ..	.. ..	Bluish white ..	White but slightly creamy.	Bluish white ..	Whitish ..	Whitish ..	White ..	White.
Staple Length ..	.. ..	7/8 inch ..	20/32 inch ..	Full 3/4 inch ..	11/16 inch ..	13/16 inch ..	3/4 inch ..	11/16 inch.
Staple Strength ..	.. ..	Good ..	Good ..	Fair ..	Fair ..	Good ..	Fair ..	Fair.
Regularity .. ..	.. ..	Regular ..	Regular ..	Regular ..	Irregular ..	Irregular ..	Fair ..	Somewhat irregular.
Value above or below contract rate ..	.. ..	Rs. 50 on ..	Rs. 35 on ..	Rs. 20 on ..	Rs. 5 on ..	Rs. 5 off ..	Rs. 15 on ..	Rs. 7 off.
Basis .. ..	.. ..	F. G. M. G. Branch ..	Rs. 102	Rs. 169	F. G. M. G. Branch .. No. 2, July-Aug. 1933 delivery, Rs. 207.	F. G. M. G. Branch .. H. C. No. 2, April- May 1935 delivery, Rs. 221.	F. G. M. G. Branch .. H. C. No. 2, July- Aug. 1935 delivery, Rs. 224.	F. G. M. G. Branch .. Hedge contract No. 2, July-Aug. 1936 delivery, Rs. 228.
Date of Valuation ..	.. ..	10-7-30	10-8-31	27-9-32	20-7-33	20-8-34	13-8-35	8-8-36.
Remarks .. ..	.. ..	..	..	..	..	..	..	..

Table 18.—SPINNING TEST RESULTS FOR UPLAND COTTON.

Sample No.	Cotton.	Season.	Date of Spinning.	WASTE PERCENTAGES.				RING FRAME PARTICULARS*.						YARN TEST RESULTS.										TEMPERATURE.		RELATIVE HUMIDITY. (°/°).
				Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss.†	Yarn Breakages per 100 spindles per hour.	Knots per Spindle Speed R.P.M.	Draft.	Turns per Inch.	I.L.A.	Diameter.			Evenness Class.	Knots per yard.	Turns per inch.	Spiraling Room.	Spiraling Room.	Spiraling Room.	Spiraling Room.	Spiraling Room.	Spiraling Room.	Spiraling Room.	Spiraling Room.
													Counts Actual.	Counts of Duplure (Inch-lb.).	Count-Work Product.											
700	Upland ..	1929-30	23-7-30	10.3	13.8	0.5	24.1	50	104	5.10	17.08	80.1	10.7	10.0	129.4	2518	3	0.5	17.1	80	73	70	70	80	73	70
706	Upland ..	1929-30	24-7-30	..	..	..	..	24	180	6.10	10.73	88.2	23.0	24.0	01.0	2184	4	11.7	18.8	80	78	72	72	80	78	72
1163	Upland ..	1930-31	17-9-31	9.2	12.3	0.3	20.9	11	100	5.05	17.08	74.1	20.0	20.1	122.2	2450	4	2.0	17.1	84	79	81	81	84	79	81
1163	Upland ..	1930-31	18-9-31	..	..	..	..	18	100	6.13	19.73	57.5	24.1	21.5	09.4	2411	3	2.7	18.0	85	77	77	77	85	77	77
1306	Upland ..	1931-32	19-7-32	10.0	13.5	0.7	22.7	114	184	5.08	17.08	92.0	10.7	19.0	118.2	2317	4	2.0	17.1	80	73	79	79	80	73	79
1306	Upland ..	1931-32	18-7-32	..	..	..	..	162	127	5.08	19.73	43.6	24.0	24.0	01.0	2253	5	2.5	10.0	80	70	78	78	80	70	78
1884	Upland ..	1932-33	19-8-33	14.4	13.8	0.6	28.6	102	185	5.08	17.08	60.0	19.8	19.0	100.4	2177	4	3.0	17.5	87	70	68	68	87	70	68
1884	Upland ..	1932-33	22-8-33	..	..	..	..	206	156	0.10	10.73	45.4	23.0	21.6	02.6	2208	5	3.5	10.2	86	09	70	70	86	09	70
2475	Upland ..	1933-34	5-9-34	13.1	14.7	0.4	28.2	31	187	0.91	17.08	72.0	20.2	20.4	117.2	2391	4	3.8	17.0	84	77	78	78	84	77	78
2475	Upland ..	1933-34	5-9-34	..	..	..	..	55	172	0.10	10.73	64.2	21.3	21.3	07.0	2357	5	4.0	10.0	83	80	72	72	83	80	72
2829	Upland ..	1934-35	27-8-35	13.1	12.0	0.0	24.8	67	176	5.08	17.08	64.2	20.2	20.5	120.2	2010	4	1.8	17.3	86	71	73	73	86	71	73
2829	Upland ..	1934-35	26-8-35	..	..	..	..	03	104	0.28	10.73	54.3	23.8	23.5	111.8	2027	5	2.0	18.7	85	70	78	78	85	70	78
3325	Upland ..	1935-36	20-8-36	8.8	10.4	0.3	19.4	21	100	5.05	17.08	80.1	19.6	20.0	137.8	2756	4	1.2	17.3	80	71	78	78	80	71	78
3325	Upland ..	1935-36	21-8-36	..	..	..	..	23	172	0.10	10.73	62.8	23.1	23.1	114.0	2933	4	1.0	10.0	83	73	79	79	83	73	79

* Diameter of ring frame front roller—7/8". Diameter of rings—1 5/8".

† It is to be noted that the total loss is for a small sample spun under mill conditions it would be less than shown here.

19.—BIJAPUR COTTON.

These samples have been very kindly supplied by the East India Cotton Association, after inspection and approval by their Standards Committee, in accordance with an arrangement made with the Association to supply to the Technological Laboratory, for testing, samples of fair average cotton of the commercial crop.

Sample No.	Cotton.	Place.	Season.
750	Bijapur	Bijapur	1929-30
1156	"	"	1930-31
1397	"	"	1931-32
1892	"	"	1932-33
2474	"	"	1933-34
2842	"	"	1934-35
3324	"	"	1935-36

I. SPINNING TESTS.

1. Treatment :—

- (a) *Blow-room.*—Upto 1933-34.—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).
1934-35 and 1935-36 :—Hopper bale opener, Horizontal cleaner, Crighton (once), Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).
- (b) *Card-room.*—Upto 1933-34 :—Card, Drawing (2 heads), Slubber, Inter, Röver and spun from single hank roving on Ring Frame No. 1.
1934-35 and 1935-36 :—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) Cotton :—

	BIJAPUR.						
	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Colour	Creamy ..	Creamy-white ..	Dull creamy ..	Dullish creamy-white ..	Creamy-white ..	Creamy-white ..	Creamy ..
Cleanliness ..	Very leafy ..	Very leafy ..	Leafy ; somewhat stained ..	.. ..	Very leafy ..	Very leafy ..	Leafy ..
Feel	Good ..	Full-bodied ..	Poorish soft ..	Good ..	Good ..	Poorish ..	Fairly good ..
Ginning and neppiness ..	Fairly well-ginned ..	.. ..	A good deal knotted ..	Some what knotted ..	Well-ginned ..	Well-ginned ..	A little knotted ..
Seeds	1.17% full clean and out ..	2% ginned and unginned ..	0.75% ginned and unginned ..	0.6% ginned and unginned ..	.. ..	.. ..	Some seeds ..
Card Silver ..	.. ..	Fairly clean ..	A little leafy ..	Clean ..	Fairly leafy ..	Little leafy ..	Almost clean ..
Card Web ..	.. ..	Even and free of nep ..	Fairly good ..	Even and free ..	Good ..	Good ..	Good ..
Weight of 10 flat strips ..	14.2 grams ..	19.5 grams ..	22.1 grams ..	15.0 grams ..	21.0 grams ..	22.3 grams ..	15.4 grams ..
Remarks .. ..	.. ..	Fully pressed ..	.. ..	.. ..	.. ..	.. ..	.. ..

(b) Yarn :—

	BIJAPUR.						
	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Cleanliness ..	Fairly clean ..	Clean ..	Some what leafy ..	Clean ..	A little leafy ..	Fairly clean ..	Almost clean ..
Evenness ..	Even ..	Some what uneven ..	Even in lower counts only ..	Fairly even ..	Fairly even ..	Even ..	Very even ..
Neppiness ..	Free of nep ..	Fairly free of nep ..	Fairly free of nep ..	Free of nep ..	Fairly free of nep ..	Free of nep ..	Practically free of nep ..
Slubbiness ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..

3. Spinning Test Details and Results :—See Table 19 on page 57.

II.—REPORT OF THE STANDARDS COMMITTEE FOR BIJAPUR COTTON.

		BIJAPUR.						
		1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Contract valued under	..	F. G. M. G. Broach ..	F. G. M. G. Broach No. 2.	F. G. M. G. Broach No. 2.	F. G. M. G. Broach No. 2, July/Aug. 1933 delivery.	F. G. M. G. Broach Hedge Contract No. 2, April/May 1935 delivery.	F. G. M. G. Broach Hedge Contract No. 2, July/Aug. 1935 delivery.	F. G. M. G. Broach Hedge Contract No. 2, July/Aug. 1936 delivery.
Class	..	Barely fine ..	Fine ..	Fully good to fine ..	Good ..	Strict fine ..	Fine ..	Fully Good to Fine.
Colour	..	Reddish ..	Creamy ..	Brownish ..	Reddish brown ..	Brownish ..	Brownish white ..	Brownish.
Staple Length	..	3/4 inch ..	13/16 inch ..	3/4 inch ..	5/8 inch ..	3/4 inch ..	11/16 inch ..	3/4 inch.
Staple Strength	..	Fair ..	Fair ..	Fair ..	Fair ..	Fair ..	Poor ..	Moderate.
Regularity ..	..	Fair ..	Irregular ..	Regular ..	Irregular ..	Fair ..	Irregular ..	Fairly regular.
Value above or below contract rate	..	Rs. 20 on ..	Rs. 15 on ..	Rs. 3 on ..	Rs. 15 off ..	Rs. 25 off ..	Par ..	Rs. 22 off.
Basis	..	Rs. 242 ..	Rs. 162 ..	Rs. 168 ..	..	F. G. M. G. Broach Hedge Contract No. 2, July/Aug. 1933 deliv., Rs. 207.	F. G. M. G. Broach Hedge Contract No. 2, July/August 1935 deliv., Rs. 224.	F. G. M. G. Broach Hedge Contract No. 2, July/Aug. 1936 deliv., Rs. 228.
Date of Valuation	..	8-6-30 ..	10-8-31 ..	13-7-32 ..	26-7-33 ..	29-8-34 ..	29-8-35 ..	8-8-36.
Remarks	..	..	..	..	..	..	..	..

Table 19.—SPINNING TEST RESULTS FOR BIJAPUR COTTON.

Sample No.	Cotton.	Season.	Date of Spinning.	Counts Nominal.	Weight of Sample lbs.	WASTE PERCENTAGES.				RING FRAME PARTICULARS.*				YARN TEST RESULTS.										TEMPERATURE HYGROMETRY (%).	
						Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss.†	Yarn per 100 spindles	Front Roller Speed R.P.M.	Spindle Speed R.P.M.	Draft.	Turns per inch.	Counts Actual.	Strength (lbs.)	Count Strength.	Counts Actual.	Work up % of (lb.-lb.)	Count Work Product.	Evenness Class.	Reps per yard.	Turns Actual. per inch	Spinning Room.	Relative Humidity (%).
760	Bijapur	1929-30	18-6-30	20A	10	11.5	9.0	0.0	22.7	50	180	..	4.81	17.93	20.2	65.5	1277	20.2	102.0	2000	4	1.5	17.0	90	70
760	Bijapur	1929-30	19-6-30	20C	..	..	..	..	..	35	107	..	5.00	20.23	19.0	70.1	1401	19.0	111.0	2200	4	1.7	19.5	92	70
1166	Bijapur	1930-31	15-8-31	20A	10	12.3	11.0	0.6	22.5	91	127	7700	5.83	17.08	10.0	53.8	1044	10.0	101.2	2074	5	2.0	17.2	86	70
1166	Bijapur	1930-31	15-8-31	20C	..	..	..	..	..	86	170	0700	5.05	20.23	20.1	50.8	1214	20.1	103.0	2101	5	1.7	10.2	80	81
1397	Bijapur	1931-32	21-7-32	12	10	16.9	13.9	0.0	29.1	51	188	7250	4.13	13.92	12.0	68.7	1294	12.0	203.1	2165	3	1.8	13.5	87	80
1397	Bijapur	1931-32	19-7-32	10	..	..	..	..	..	48	170	7800	5.22	15.97	10.1	65.7	1038	10.1	124.0	1000	1	1.5	15.4	80	70
1892	Bijapur	1932-33	4-9-33	16	10	18.1	9.5	0.0	29.4	102	182	8000	5.13	15.97	10.1	70.0	1130	10.1	125.0	2022	4	0.5	15.1	80	70
1892	Bijapur	1932-33	4-9-33	20A	..	..	..	..	..	188	181	9000	5.81	17.08	10.0	55.8	1093	10.0	105.8	2015	5	1.0	17.0	87	75
2474	Bijapur	1933-34	5-9-34	10	10	13.1	13.0	0.4	24.8	18	192	8550	5.43	15.97	15.5	92.1	1137	15.7	148.0	2324	4	1.8	15.1	85	78
2474	Bijapur	1933-34	5-9-34	20A	..	..	..	..	..	57	187	9200	5.81	17.08	10.7	64.3	1297	10.0	107.2	2133	5	1.5	17.2	84	73
2842	Bijapur	1934-35	5-9-35	10	10	11.0	13.8	0.3	25.4	42	103	8700	5.43	15.97	10.2	60.0	1001	15.0	182.4	2000	3	1.0	15.4	85	73
2842	Bijapur	1934-35	10-9-35	20A	..	..	..	..	..	31	177	8750	5.57	17.08	10.3	81.5	1573	10.2	133.8	2500	1	0.8	17.0	89	82
2842	Bijapur	1934-35	13-9-35	20B	..	..	..	..	..	16	190	9400	5.68	10.25	20.0	81.4	1012	10.0	125.4	2468	3	1.5	13.1	85	70
3224	Bijapur	1935-36	19-8-36	14	10	11.0	10.6	0.3	21.5	22	108	8500	5.55	14.98	11.7	81.1	1102	11.5	185.4	2045	3	0.8	11.9	80	75
3224	Bijapur	1935-36	20-8-36	10	..	..	..	..	..	12	194	8450	0.25	15.97	10.2	71.5	1100	10.2	145.8	2392	3	0.5	15.1	85	70
3224	Bijapur	1935-36	19-8-36	20B	..	..	..	..	..	21	194	10200	5.60	10.25	10.7	63.7	1353	20.0	116.2	2324	3	1.0	13.7	86	70

* Diameter of ring frame front roller—1½". Diameter of rings—1½".

† It is to be noted that the total loss is for a small sample weighing 10 lbs.; for bulk sample spun under mill conditions it would be less than shown here.

20.—BAGALKOTE COTTON.

These samples have been very kindly supplied by the East India Cotton Association, after inspection and approval by their Standards Committee, in accordance with an arrangement made with the Association to supply to the Technological Laboratory, for testing, samples of fair average cotton of the commercial crop.

Sample No.	Cotton.	Place.	Season.
761	Bagalkote	Bagalkote	1929-30
1157	"	"	1930-31
1433	"	"	1931-32
1893	"	"	1932-33
2460	"	"	1933-34
2840	"	"	1934-35
3391	"	"	1935-36

I. SPINNING TESTS.

1. Treatment :—

(a) *Blow-room*.—Upto 1933-34 (inclusive) :—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).

1934-35 and 1935-36 :—Hopper bale opener, Horizontal cleaner, Crighton (once), Gridded dust-trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).

(b) *Card-room*.—Upto 1933-34 (inclusive) :—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.

1934-35 and 1935-36 :—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1. possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) *Cotton* :—

	BAGALKOTE.						
	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Colour	Creamy ..	Creamy ..	Creamy-white	Creamy ..	Dullish creamy	Creamy ..	Creamy-white.
Cleanliness	Very leafy ..	Leafy ..	Leafy; slightly stained.	Somewhat stained; leafy.	Leafy ..	Leafy ..	Leafy.
Feel	Good ..	Good ..	Good ..	Good ..	Good ..	Fairly good	Good.
Ginning and noppiness ..	Fairly well-ginned.	Well-ginned ..	Well-ginned ..	Fairly well-ginned.	Well-ginned ..	Good and knotted and nopped by ginning.	Well-ginned.
Seeds	1.8% seeds ..	A fair amount of out seed; 1.9% ginned and unginned.	0.75% unginned.	1/2% ginned and unginned.	2.97% partly ginned seeds and kapas.	..	1.88% full clean seeds.
Card Sliver .. ..	..	Fairly clean ..	Almost clean ..	Clean ..	A little leafy	Fairly clean ..	A little leafy.
Card Web .. ..	..	Even and free of nopp.	Fairly good ..	Even and nopp-free.	..	Somewhat nippy.	Good.
Weight of 10 flat strips ..	15.5 grams ..	21.2 grams ..	19.2 grams ..	19.5 grams ..	24.4 grams ..	27.9 grams ..	17.5 grams.
Remarks .. ..	..	A trifle knotty.	Ring frame run at unusually low speed due to excessive breakages.	..	..	..	..

(b) *Yarn* :—

		BAGALKOTE.						
		1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Cleanliness	.. ..	Clean ..	Slightly leafy	Fairly clean ..	Clean ..	Almost clean ..	Fairly clean ..	A little leafy.
Evenness	.. ..	Fairly even	Fairly even	Unusually uneven.	Fairly even	Fairly even	Even ..	Even.
Neppiness	.. ..	Free of nep	Fairly free of nep.	Almost nep-free	Almost free of nep.	Almost free of nep.	Somewhat nippy.	Almost free of nep.
Slubbiness	.. ..	..	..	A good deal slubby.	..	..	A trifle slubby.	..

3. *Spinning Test Details and Results* :—See Table 20 on page 60.

Table 20.—SPINNING TEST RESULTS FOR BAGALKOTE COTTON.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27

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Sample No.	Cotton.	Season.	Date of Spinning.	Counts Nominal.	Weight of Sample (lbs.)	WASTE PERCENTAGES.				RING FRAME PARTICULARS.*					YARN TEST RESULTS.										TEMPERATURE (°F.).	RELATIVE HUMIDITY (%).	
						Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss.†	Yarn Breakages per hour.	Front Roller Speed R.P.M.	Spindle Speed R. P. M.	Draft.	Turns per Inch.	Lbs.			DALMATIC.			Evenness Class.	Neps per yard.	Turns per Inch Actual.	Spinning Room.			Testing Room.
															Counts Actual.	Strength (lbs.).	Count-Weight (Inch-lb.).	Count-Weight (Inch-lb.).	Counts Actual.	Work of Rupture (Inch-lb.).								Count-Work Product.
761	Bagalkote ..	1929-30	18-6-30	20A	10	14.5	0.3	0.6	23.0	65	186	..	5.00	17.08	10.7	69.6	1371	112.4	2214	4	1.7	17.0	00	64	79		
761	Bagalkote ..	1929-30	18-6-30	20C		..	..	..	..	35	197	..	5.10	20.23	10.7	78.4	1644	111.0	2221	4	2.0	19.4	02	61	75
1157	Bagalkote ..	1930-31	14-8-31	20A	10	13.6	12.2	0.5	24.5	57	164	8100	0.65	17.08	10.0	57.0	1134	104.6	2123	5	2.2	17.3	85	78	80		
1157	Bagalkote ..	1930-31	14-8-31	20C		..	..	..	..	63	100	10850	6.10	20.23	20.0	66.1	1822	100.8	2157	4	2.0	19.4	87	74	70
1433	Bagalkote ..	1931-32	26-8-32	12	0	13.7	14.8	0.8	27.1	124	164	6000	4.60	14.68	12.0	40.6	679	184.8	2206	5	1.2	14.2	80	70	72		
1433	Bagalkote ..	1931-32	25-8-32	10B		..	..	..	..	150	130	6000	5.00	16.07	15.8	34.8	542	117.0	1870	6	1.5	10.3	80	71	70
1433	Bagalkote ..	1931-32	26-8-32	20C		..	..	..	..	173	110	9200	5.81	20.23	10.2	25.8	405	95.4	1794	7	1.0	10.4	80	70	69
1893	Bagalkote ..	1932-33	4-9-33	16A	10	13.8	11.7	0.3	24.1	65	182	8660	5.23	15.67	15.0	63.3	1455	137.2	2105	4	1.5	15.3	86	72	74		
1893	Bagalkote ..	1932-33	4-9-33	16B		..	..	..	..	18	163	8660	5.34	16.67	15.8	98.4	1655	147.4	2358	4	1.8	10.6	87	67	78
2460	Bagalkote ..	1933-34	23-8-34	16A	10	15.0	14.0	0.3	27.1	112	188	8250	5.53	15.07	10.4	84.5	1386	138.2	2206	4	1.8	15.5	84	77	80		
2460	Bagalkote ..	1933-34	22-8-34	20A		..	..	..	..	117	175	8450	5.83	17.08	10.0	04.6	1286	100.4	2156	4	2.2	17.3	84	70	78
2460	Bagalkote ..	1933-34	22-8-34	20B		..	..	..	..	21	188	9860	5.83	10.26	10.8	50.2	1113	112.4	2226	4	2.0	18.8	85	75	74
2840	Bagalkote ..	1934-35	3-9-35	16A	10	11.2	13.2	0.3	24.0	118	103	8500	5.55	15.07	10.7	110.2	1840	102.8	3102	3	4.0	15.4	84	78	73		
2840	Bagalkote ..	1934-35	3-9-35	20A		..	..	..	..	16	180	8550	5.93	17.08	20.5	79.7	1634	130.4	2900	4	3.5	17.2	85	77	72
2840	Bagalkote ..	1934-35	3-9-35	20B		..	..	..	..	5	186	9000	5.03	10.20	20.0	00.0	1800	133.6	2085	4	2.8	18.5	85	74	71
2840	Bagalkote ..	1934-35	17-9-35	24		..	..	..	..	30	176	9550	7.22	10.72	25.5	50.0	1443	07.0	2464	4	3.2	10.0	84	70	70
3391	Bagalkote ..	1935-36	7-10-30	16	10	14.5	12.2	0.4	25.2	12	164	8800	5.43	15.07	16.1	85.7	1380	138.2	2200	3	1.2	15.0	88	72	70		
3391	Bagalkote ..	1935-36	5-10-30	20A		..	..	..	..	10	176	8500	5.95	17.08	20.1	01.2	1230	108.4	2233	4	1.2	17.2	89	70	71
3391	Bagalkote ..	1935-36	6-10-36	20B		..	..	..	..	42	164	10200	6.07	10.20	20.1	72.2	1451	110.6	2278	4	1.0	18.5	90	70	72

* Diameter of ring-frame front roller—7/8". Diameter of rings—1.5/8".

† It is to be noted that the total loss is for a small sample weighing 10 lbs. or thereabout; for bulk sample spun under mill conditions it would be less than shown here.

21.—CAMBODIA COTTON.

These samples have been very kindly supplied by the East India Cotton Association, after inspection and approval by their Standards Committee, in accordance with an arrangement made with the Association to supply to the Technological Laboratory, for testing, samples of fair average cotton of the commercial crop.

Sample No.	Cotton.	Place.	Season.
762	Cambodia.	Coimbatore.	1929-30.
1159	"	Tirupur.	1930-31.
1398	"	"	1931-32.
1894	"	"	1932-33.
2436	"	"	1933-34.
2839	"	"	1934-35.
3390	"	"	1935-36.

I. SPINNING TESTS.

1. Treatment :—

(a) *Blow-room.*—Upto 1933-34 (inclusive) :—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).

1934-35 and 1935-36 :—Hopper bale opener, Horizontal Cleaner, Crighton (once), Gridded dust trunks, Cage exhaust, Hopper Feeder, Scutcher (3 times).

(b) *Card-room.*—Upto 1933-34 (inclusive) :—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.

1934-35 and 1935-36 :—As above, but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) Cotton :—

		CAMBODIA.						
		1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Colour	Creamy-white to creamy; bright.	Creamy-white; bright.	Creamy-white; bright.	Creamy-white; bright.	White to creamy-white; bright.	White to creamy-white; bright.	White to creamy-white; bright.	
Cleanliness	Clean.	Fairly clean.	Clean.	Clean.	Clean.	Clean.	Clean.	
Feel	Good-bodied.	Very good.	Good.	Good-bodied.	Good.	Softish smooth.	Good-bodied.	
Ginning and Neppiness	Nepped and knotted.	Well-ginned.	Fairly well-ginned.	Fairly well-ginned.	A little knotted in ginning.	A little knotted in ginning.	Fairly well-ginned.	
Seeds .. ..	.. ..	.. ..	.. ..	.. ..	1% full seeds.	Some unginned.	.. ..
Card Sliver .. ..	.. ..	Clean.	Clean.	Clean.	Clean.	Clean.	Clean.
Card Web	A little neppy.	A trifle neppy.	Fairly good.	Fairly good.	Even and somewhat neppy.	Fairly good.	A little neppy.	
Weight of 10 flat strips	22.1 grams.	25.3 grams.	22.2 grams.	27.8 grams.	28.8 grams.	31.0 grams.	21.2 grams.	
Remarks .. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..

(b) Yarn :—

		CAMBODIA.						
		1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Cleanliness	.. ..	Clean	Clean	Clean	Clean	A little leafy ..	Clean	Almost clean.
Evenness	.. ..	Fairly even ..	Even	Even	Fairly even ..	Fairly even ..	Even	Even in the 20's only.
Neppiness	.. ..	Fairly neppy ..	A little neppy ..	A little neppy ..	Somewhat neppy.	Somewhat neppy.	Somewhat neppy.	Fairly neppy.
Stubbiness	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..

3. *Spinning Test Details and Results* :—See Table 21 on page 63.

II.—REPORT OF THE STANDARDS COMMITTEE FOR CAMBODIA COTTON.

CAMBODIA.							
	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Contract valued under	..	F. G. M. G. Broach. No. 2.	F. G. M. G. Broach. No. 2.	F. G. M. G. Broach. No. 2, July/Aug. 1933 delivery.	F. G. M. G. Broach. No. 2.	F. G. M. G. Broach. Hedge Contract No. 2, July/Aug. 1935 delivery.	F. G. M. G. Broach. Hedge Contract No. 2, April/May 1937 delivery.
Class	Fine.	Superfine.	Fine to superfine.	Barely fully good.	Strict Fine.	Fine.
Colour	Creamy.	Creamy.	Creamy-white.	Dull creamy.	Creamy-white.	Creamy.
Staple Length	One inch.	One inch.	31/32 inch.	15/16 inch.	15/16 inch.	15/16 inch.
Staple Strength	Good.	Good.	Good.	Good.	Fair.	Fair.
Regularity	Regular.	Regular.	Regular.	Slightly irregular.	Fair.	Moderately regular.
Value above or below contract rate..	..	Rs. 30 on.	Rs. 60 on.	Rs. 65 on.	Rs. 63 on.	Rs. 75 on.	Rs. 35 on.
Basis	Rs. 242.	Rs. 163.	F. G. M. G. Broach. No. 2, July/Aug. 1933 delivery.	F. G. M. G. Broach. No. 2, July/Aug. 1934 delivery, Rs. 221.	F. G. M. G. Broach. Hedge Contract No. 2, July/Aug. 1935 delivery, Rs. 224.	F. G. M. G. Broach. Hedge Contract No. 2, April/May 1937 delivery, Rs. 231.
Date of Valuation	6-6-30.	13-7-32.	26-7-33.	31-7-34.	20-8-35.	28-9-36.
Remarks

Table 21.—SPINNING TEST RESULTS FOR CAMBODIA COTTON.

Sample No.	Cotton.	Season.	Date of Spinning.	WASTE PERCENTAGES.				RING FRAME PARTICULARS.*						YARN TEST RESULTS.										TEMPERATURE HUMIDITY (%).	
				Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss.†	Yarn Breakages per 100 spindles per hour.	Front Roller Speed ft. r. m.	Spindle Speed ft. r. m.	Draft.	Turns per Inch.	LZL.			BALISTIC.			Twistness Class.	Keps per Yard.	Turns per Inch Actual.	Spinning Room.	Spinning Room.	Relative Humidity (%).	
													Counts Actual.	Strength (lbs.)	Count-Strength Product.	Counts Actual.	Work of Rupture (inches).	Count-Work Product.							
762	Cambodia ..	1929-30	19-4-30	5.6	11.3	0.6	16.7	16	175	14	5.95	10.73	23.0	94.8	1529	23.0	102.1	2417	4	5.5	10.9	91	90	74	
762	Cambodia ..	1929-30	20-4-30	..	..	..	..	30	160	..	7.50	21.80	30.0	46.4	1392	30.0	63.0	2058	5	5.7	21.1	80	95	76
1159	Cambodia ..	1930-31	18-8-31	5.8	12.0	0.5	18.0	31	180	9700	5.91	10.73	23.3	73.0	1722	23.3	118.8	2703	3	3.5	18.8	84	70	82	
1159	Cambodia ..	1930-31	18-9-31	..	..	..	..	22	160	9700	7.39	23.11	30.1	53.6	1613	29.5	60.4	2607	4	4.7	22.1	81	78	80
1308	Cambodia ..	1931-32	20-7-32	5.6	14.7	0.4	19.8	20	178	9600	5.79	10.73	23.5	89.6	1612	23.5	119.0	2678	3	3.8	10.2	85	77	78	
1308	Cambodia ..	1931-32	20-7-32	..	..	..	..	26	158	9650	7.22	21.80	29.5	61.4	1616	29.5	69.0	2555	4	3.6	21.4	86	70	82
1894	Cambodia ..	1932-33	30-8-33	5.5	13.8	0.4	18.9	55	178	9600	5.53	10.73	23.6	65.0	1518	24.2	110.0	2662	4	3.5	19.1	87	70	66	
1894	Cambodia ..	1932-33	30-8-33	..	..	..	..	79	162	9700	7.03	21.80	29.9	45.2	1351	30.1	82.2	2474	5	3.8	20.6	88	69	63
2430	Cambodia ..	1933-34	9-8-34	7.5	14.0	0.1	21.3	10	197	9550	5.81	17.93	29.0	83.6	1672	29.0	133.2	2604	3	5.2	17.3	84	80	82	
2430	Cambodia ..	1933-34	9-8-34	..	..	..	..	43	162	9500	0.71	21.80	30.8	46.4	1429	30.7	83.0	2518	5	4.2	21.1	84	80	82
2430	Cambodia ..	1933-34	9-8-34	..	..	..	..	48	140	9050	7.43	23.29	33.7	59.6	1335	33.7	75.0	2528	0	4.5	22.0	84	80	82
2839	Cambodia ..	1934-35	4-9-35	5.0	14.3	0.2	19.2	5	197	9700	0.67	17.93	29.2	91.2	1812	29.2	134.1	2709	3	3.8	17.1	85	72	72	
2839	Cambodia ..	1934-35	4-9-35	..	..	..	..	13	158	9700	0.23	21.80	29.8	54.5	1624	29.7	89.0	2631	4	3.5	21.1	80	72	74
2839	Cambodia ..	1934-35	5-9-35	..	..	..	..	12	151	9700	7.14	23.29	33.2	47.1	1564	33.5	80.8	2797	5	3.5	22.0	80	71	70
3300	Cambodia ..	1935-36	5-10-36	5.5	12.1	0.3	17.2	0	199	9550	6.07	17.93	29.0	90.2	1804	29.0	133.4	2608	3	3.5	17.3	89	69	72	
3390	Cambodia ..	1935-36	9-10-36	..	..	..	..	12	160	9400	6.63	21.86	29.3	57.0	1670	29.5	90.0	2565	5	3.2	20.9	89	72	72
3390	Cambodia ..	1935-36	7-10-36	..	..	..	..	12	140	9400	7.87	23.26	33.2	40.0	1327	32.7	77.2	2524	5	3.8	22.2	80	70	72

* Diameter of ring frame front roller—7/8". Diameter of rings—1.5/16".

† It is to be noted that the total loss is for a small sample weighing 10 lbs.; for bulk sample spun under mill conditions it would be less than shown here.

22.— TINNEVELLY COTTON.

These samples have been very kindly supplied by the East India Cotton Association, after inspection and approval by their Standards Committee, in accordance with an arrangement made with the Association to supply to the Technological Laboratory, for testing, samples of fair average cotton of the commercial crop.

Sample No.	Cotton.	Place.	Season.
797	Tinnevely.	Tuticorin.	1929-30
1162	"	"	1930-31
1400	"	"	1931-32
1883	"	"	1932-33
2461	"	"	1933-34
2841	"	"	1934-35
3302	"	Virudanagar.	1935-36

I. SPINNING TESTS.

1. Treatment :—

(a) *Blow-room*.—Upto 1933-34 (inclusive):—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).

1934-35 and 1935-36 :—Hopper bale opener, Horizontal cleaner, Crighton (once), Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).

(b) *Card-room*.—Upto 1933-34 (inclusive):—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.

1934-35 and 1935-36 :—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) Cotton :—

	TINNEVELLY.						
	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Colour	Creamy-white, fairly bright.	Creamy-white.	White to creamy-white; brightish.	White to creamy-white; bright.	Creamy-white, bright.	White to creamy-white; bright.	White to creamy-white.
Cleanliness	Fairly clean; a little stained.	Fairly clean; occasional spots of stain.	Fairly clean.	Clean.	Fairly clean.	Fairly clean.	Somewhat stained; a little leafy.
Feel	Good soft.	Soft but good.	Good.	Good.	Smooth and bodied.	Good.	Good-bodied.
Ginning and neppiness	Fairly knotted and nopped.	Fairly well-ginned.	Fairly well-ginned.	Well-ginned.	Slightly knotted.	Well-ginned.	A little knotted.
Seeds	0.75% fully clean.	..	..	..	..	..	..
Card sliver .. ..	..	Practically clean.	Almost clean.	Clean.	Fairly clean.	Clean.	Almost clean.
Card web	Cloudy and neppy.	Even and free of nep.	Almost nep-free.	Good.	A little neppy.	Good.	Good.
Weight of 10 flat strips	23.2 grams.	19.0 grams.	20.6 grams.	22.4 grams.	27.2 grams.	26.1 grams.	16.7 grams.
Remarks .. ..	..	..	..	..	..	..	..

(b) Yarn :—

	TINNEVELLY.						
	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Cleanliness	Leafy.	A trifle leafy.	Clean.	Clean.	Almost clean.	Fairly clean.	Fairly clean.
Evenness	Fairly even.	Fairly uneven.	Fairly even.	Fairly even.	Fairly even.	Even.	Even.
Neppiness	Very neppy.	Neppy.	Free of nep.	Free of nep.	Fairly neppy.	Fairly free of nep.	A little neppy.
Slubbiness .. ..	..	..	..	..	..	Somewhat slubby.	..

3. *Spinning Test Details and Results* :—See Table 22 on page 66.

II--REPORT OF THE STANDARDS COMMITTEE FOR TINNEVELLY COTTON.

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Tinnevely.							
	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Contract valued under
	F.G.M.G. Broach	F.G.M.G. Broach	F.G.M.G. Broach	F.G.M.G. Broach	F.G.M.G. Broach	F.G.M.G. Broach	F.G.M.G. Broach
	No. 2.	No. 2.	No. 2.	No. 2, July/Aug. 1933 delivery.	Hedgo Contract No. 2. 1933 delivery.	Hedgo Contract No. 2, July/Aug. 1935 delivery.	Hedgo Contract No. 2, April/May 1937 delivery.
Class	Good.	Fully good to fine.	Superfine.	Superfine.	Strict Fully good.	Fine.	Fully good to fine.
Colour	Creamy dull.	Creamy grey.	Creamy-white.	Greyish-white.	Creamy-white.	Whitish.	Creamy-white.
Staple Length	31/32 inch.	3/4 inch.	7/8 inch.	13/16 inch.	Full 13/16 inch.	3/4 inch.	3/4 inch.
Staple Strength	Very good.	Weak.	Fair.	Good.	Fair.	Fair.	Fair.
Regularity	Irregular.	Very irregular.	Regular.	Regular.	Irregular.	Irregular.	Irregular.
Value above or below contract rate	Rs. 80 on.	Rs. 30 on.	Rs. 25 on.	Rs. 40 on.	Rs. 25 on.	Rs. 30 on.	Rs. 5 on.
Basis	F.G.M.G. Broach.	Rs. 143.	Rs. 193.	F.G.M.G. Broach No. 2, July/Aug. 1933 delivery. Rs. 207.	F.G.M.G. Broach Hedgo Contract No. 2, July/Aug. 1934 delivery. Rs. 220.	F.G.M.G. Broach Hedgo Contract No. 2, July/Aug. 1935 delivery. Rs. 224.	F.G.M.G. Broach Hedgo Contract No. 2, April/May 1937 delivery. Rs. 221.
Date of Valuation	16-7-30.	25-8-31.	13-7-32.	20-7-33.	13-8-34.	20-8-35.	28-9-36.
Remarks	..	Poor style for this growth.	..	..	..	..	..

Table 22.—SPINNING TEST RESULTS FOR TINNEVELLY COTTON.

Sample No.	Cotton.	Season.	Date of Spinning.	Counts Nominal.	Weight of Sample (lbs.)	WASTE PERCENTAGES.				RING FRAME PARTICULARS.*						YARN TEST RESULTS.										TEMPERATURE (°F.).	RELATIVE HUMIDITY (%).	Testing Room.	Spinning Room.
						Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss.†	Yarn Breakages per 100 spindles per hour.	Front Roller Speed R.P.M.	Spindle Speed R.P.M.	Draft.	Turns per inch.	I.E.A.			BALISTIC.				Reps per yard.	Turns per inch Actual.						
															Counts Actual.	Strength (lbs.).	Count-Strength Product.	Counts Actual.	Work of Rupture (inch-lb.).	Count-Work Product.	Evenness Class.								
797	Tinnevely ..	1929-30	21-7-30	20A	10	8.0	12.4	0.4	10.8	30	170	..	5.21	17.08	19.5	75.5	1472	10.7	122.8	2410	4	14.5	17.1	86	76	78			
797	Tinnevely ..	1929-30	21-7-30	20C	10	..	..	..	..	30	192	..	5.21	20.23	19.5	83.1	1020	10.7	123.2	2427	4	13.0	19.2	87	71	73
1162	Tinnevely ..	1930-31	2-0-31	10	10	0.4	10.3	0.0	10.0	109	122	7350	5.05	15.97	15.0	53.9	841	15.6	127.8	1004	4	6.2	15.6	85	75	80			
1400	Tinnevely ..	1931-32	21-7-32	12	10	3.9	11.7	0.5	17.3	103	188	7250	5.00	13.02	12.4	84.4	1046	12.2	200.2	2442	4	0.8	13.3	82	70	80			
1400	Tinnevely ..	1931-32	21-7-32	10	..	..	..	..	..	104	162	7300	5.35	15.07	15.6	63.0	983	15.5	147.2	2292	4	1.2	15.3	88	74	85
1853	Tinnevely ..	1932-33	18-8-33	12	10	0.7	11.4	0.3	17.0	15	198	7050	5.00	13.92	12.1	105.8	1280	12.3	206.8	2544	3	1.0	13.1	87	60	70			
1853	Tinnevely ..	1932-33	18-8-33	16	..	..	..	..	..	36	180	8000	5.11	15.07	15.4	78.4	1207	15.8	170.0	2686	4	1.2	13.4	80	70	73
2461	Tinnevely ..	1933-34	23-8-34	10	10	0.6	13.7	0.2	19.5	0	188	8250	5.07	15.97	10.3	82.3	1341	10.1	155.6	2505	4	5.5	15.4	84	77	80			
2461	Tinnevely ..	1933-34	22-8-34	20A	..	..	..	..	..	36	175	8150	5.05	17.98	20.1	50.9	1144	20.2	116.2	2327	4	4.0	17.3	84	77	78
2461	Tinnevely ..	1933-34	22-8-34	20B	..	..	..	..	..	10	198	9800	5.83	19.20	10.4	75.2	1479	10.5	124.4	2420	4	4.8	18.6	85	74	74
2841	Tinnevely ..	1934-35	5-0-35	10	10	5.3	13.1	0.4	18.0	97	194	8600	5.32	15.97	16.3	71.4	1104	16.0	148.0	2378	3	1.5	15.4	85	76	73			
2841	Tinnevely ..	1934-35	9-0-35	20A	..	..	..	..	..	62	176	8750	5.83	17.98	20.2	48.0	982	20.1	111.2	2235	4	1.2	17.2	86	70	70
2841	Tinnevely ..	1934-35	9-0-35	20B	..	..	..	..	..	88	185	9650	5.83	19.20	20.4	61.8	1251	20.3	110.0	2307	4	1.5	18.0	86	71	82
3392	Tinnevely ..	1935-36	7-10-36	10	10	6.2	10.5	0.2	16.2	0	195	8800	5.54	15.97	15.6	103.0	1016	16.3	198.4	3036	3	2.8	15.2	89	72	70			
3392	Tinnevely ..	1935-36	8-10-36	20A	..	..	..	..	..	10	181	8950	5.95	17.98	10.6	78.9	1246	19.8	129.2	2638	3	3.2	17.3	80	69	70

* Diameter of ring frame front roller—1½".

† It is to be noted that the totals for a small sample weighing 10 lbs.; for bulk sample spun under mill conditions it would be less than shown here.

23.—KARUNGANNI COTTON.

These samples have been very kindly supplied by the East India Cotton Association, after inspection and approval by their Standards Committee, in accordance with an arrangement made with the Association to supply to the Technological Laboratory, for testing, samples of fair average cotton of the commercial crop.

Sample No.	Cotton.	Place.	Season.
763	Karunganni.	Tuticorin.	1929-30
1160	"	Virudanagar.	1930-31
1399	"	Tuticorin.	1931-32
1895	"	"	1932-33
2476	"	Tirupur.	1933-34
2843	"	Tuticorin.	1934-35
3393	"	Virudanagar.	1935-36

I.—SPINNING TESTS.

1. Treatment :—

(a) *Blow-room*.—Upto 1933-34 (inclusive) :—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).

1934-35 and 1935-36 :—Hopper bale opener, Horizontal cleaner, Crighton (once), Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).

(b) *Card-room*.—Upto 1933-34 (inclusive) :—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.

1934-35 and 1935-36 :—As above, but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) Cotton :—

	KARUNGANNI.						
	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Colour	Creamy white; bright.	Creamy white; bright.	Creamy white; brightish.	White to creamy white; bright.	White to creamy white; brightish.	White to creamy white; bright.	White to creamy white; bright.
Cleanliness	Clean.	Fairly clean.	Almost clean.	Clean.	Fairly clean.	Fairly clean.	Clean; a little stained.
Feel	Good soft.	Good.	Good.	Good-bodied.	Good soft.	Good smooth.	Good smooth.
Ginning and neppiness ..	Badly strung and nopped.	Well-ginned.	Well-ginned apart from some knot-tiness.	Well-ginned.	Slightly knotted in ginning.	Fairly well-ginned.	Well-ginned.
Seeds .. .. .	..	..	..	..	..	..	..
Card Sliver .. ..	..	Almost clean.	Clean.	Clean.	Fairly clean.	Almost clean.	Fairly clean.
Card Web	Fairly neppy.	Practically free of nop.	Fairly good.	Good.	Somewhat neppy.	Good.	Good.
Weight of 10 flat strips ..	19.8 grams.	21.7 grams.	20.7 grams.	19.6 grams.	26.3 grams.	28.0 grams.	15.3 grams.
Remarks .. .. .	..	..	..	..	..	..	..

(b) Yarn :—

	KARUNGANNI.						
	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Cleanliness	Fairly clean.	Practically clean.	Clean.	Clean.	Fairly clean.	Clean.	Almost clean.
Evenness	Fairly even.	Fairly even.	Fairly even.	Fairly even.	Even.	Fairly even.	Even.
Noppiness	Neppy.	Somewhat neppy.	Somewhat neppy.	Free of nep.	Somewhat neppy.	Fairly neppy.	Fairly neppy.
Slubbiness .. ..	..	..	..	A trifle slubby.	..	A trifle slubby.	..

3. *Spinning Test Details and Results* :—See Table 23 on page 69.

III—REPORT OF THE STANDARDS COMMITTEE FOR KARUNGANNI COTTON.

KARUNGANI.							
	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Contract valued under	F.G.M.G. Broach.	F.G.M.G. Broach No. 2.	F. G. M. G. Broach No. 2.	F. G. M. G. Broach No. 2, July/August 1933 delivery.	F. G. M. G. Broach Hedge Contract No. 2, April/May 1935 delivery.	F. G. M. G. Broach Hedge Contract No. 2, July/August 1935 delivery.	F. G. M. G. Broach Hedge Contract No. 2, April/May 1937 delivery.
Class	Fine.	Fine.	Extra superfine.	Superfine.	About fine.	Strict fine.	Fine.
Colour	Slight creamy.	White to creamy.	Whitish.	Slightly creamy-white.	Creamy.	Whitish.	Creamy-white.
Staple Length	7/8 inch.	15/16 inch.	15/16 inch.	7/8 inch.	7/8 inch.	7/8 inch.	7/8 inch.
Staple Strength	Fair.	Good.	Good.	Good.	Fair.	Good.	Fair.
Regularity	Irregular.	Regular.	Regular.	Regular.	Fair.	Irregular.	Regular.
Value above or below contract rate	Rs. 75 on.	Rs. 55 on.	Rs. 55 on.	Rs. 45 on.	Rs. 35 on.	Rs. 50 on.	Rs. 20 on.
Basis	Rs. 242.	Rs. 162.	Rs. 103.	F. G. M. G. Broach No. 2, July/August 1933 delivery, Rs. 207.	F. G. M. G. Broach H. C. No. 2, April/May 1935 delivery, Rs. 224.	F. G. M. G. Broach Hedge Contract No. 2, July/August 1935 delivery, Rs. 224.	F. G. M. G. Broach Hedge Contract No. 2, April/May 1937 delivery, Rs. 231.
Date of Valuation	6-6-30.	10-8-31.	13-7-32.	20-7-33.	20-8-34.	20-8-35.	28-9-36.
Remarks							

Table 23.—SPINNING TEST RESULTS FOR KARUNGANNI COTTON.

Sample No.	Cotton.	Season.	Date of Spinning.	WASTE PERCENTAGES.				RING FRAME PARTICULARS.*				YARN TEST RESULTS										TEMPERATURE		RELATIVE HUMIDITY (%).		
				Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss†	Yarn Breakage per 100 spindles per hour.	Front Roller Speed R.P.M.	Spiral Speed R.P.M.	Draft.	Turns per Inch.	Lvs.			Ballistic.				Spiraling Room.	Spiraling Room.					
													Counts Actual.	Strength (lbs.)	Count-Statistic Product.	Counts Actual.	Work of (inch-lb.)	Count-Work Product.	Reverses (Fms.)			Neps per yard.	Turns per inch Actual.			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
763	Karunganni	1929-30	20-6-30	20A	10	5.5	10.1	0.4	15.3	33	189	..	5.10	17.93	19.4	78.6	1149	19.5	129.1	2465	4	6.0	16.8	90	61	77
763	Karunganni	1929-30	20-6-30	20B	..	..	..	..	..	15	199	..	5.20	20.23	19.5	87.9	1214	19.4	132.0	2419	4	7.0	19.2	91	64	73
1100	Karunganni	1930-31	17-8-31	20A	10	5.0	11.0	0.0	19.8	07	190	0100	5.05	17.93	20.4	62.5	1255	20.3	120.8	2452	4	2.5	17.2	84	79	52
1100	Karunganni	1930-31	18-8-31	24	..	..	..	..	..	71	160	0000	0.07	19.73	23.6	50.1	1321	21.5	101.4	2538	5	5.0	19.0	85	77	73
1300	Karunganni	1931-32	20-7-32	20A	10	5.8	11.4	0.6	17.0	135	180	0300	5.31	17.93	19.9	67.3	1260	20.2	117.2	2397	4	3.0	17.2	87	70	83
1300	Karunganni	1931-32	21-7-32	24	..	..	..	..	..	119	129	8300	0.13	19.73	23.7	59.9	1206	21.5	104.4	2453	5	3.2	18.8	86	77	85
1805	Karunganni	1932-33	29-8-33	16	10	6.9	10.0	0.6	17.2	152	181	8200	5.33	15.97	15.7	63.4	1030	15.8	127.6	2014	4	0.5	15.3	87	63	63
1805	Karunganni	1932-33	30-8-33	20A	..	..	..	..	..	223	165	0000	5.33	17.94	19.5	50.0	975	19.5	106.2	2071	5	1.0	17.2	83	67	63
2470	Karunganni	1933-34	5-9-34	10	10	7.5	13.3	0.3	20.1	6	192	8250	5.53	15.97	16.0	91.2	1507	15.9	163.2	2535	3	3.5	15.5	85	78	74
2470	Karunganni	1933-34	5-9-34	20A	..	..	..	..	..	52	185	0250	0.22	17.94	20.1	83.9	1241	20.0	115.6	2312	4	4.0	17.3	83	91	71
2843	Karunganni	1934-35	9-9-35	10	10	6.2	13.8	0.3	19.4	30	193	8700	5.64	15.97	19.2	114.8	1460	15.8	209.6	3312	4	3.2	15.5	86	71	80
2843	Karunganni	1934-35	10-9-35	20A	..	..	..	..	..	16	194	0200	5.05	17.94	19.9	91.9	1630	20.1	129.6	2406	4	3.8	17.4	84	71	83
3303	Karunganni	1935-36	7-10-36	10	10	4.4	0.5	0.4	13.8	21	200	8400	5.54	15.97	15.7	107.1	1631	15.8	207.2	3274	3	1.0	15.2	89	72	70
3303	Karunganni	1935-36	8-10-36	20A	..	..	..	..	..	10	180	8400	5.05	17.94	19.7	86.2	1530	19.9	141.6	2413	3	3.9	17.2	89	72	72

* Diameter of ring frame front roller—7/8". Diameter of ring—1.53".

† It is to be noted that the total loss is for a small sample weighing 10 lbs.; for bulk sample spun under mill conditions it would be less than shown here.

24.—A. R. KAMPALA COTTON.

These samples have been very kindly supplied by the East India Cotton Association, after inspection and approval by their Special Appeal Committee on African Cottons in accordance with an arrangement made with the Association to supply to the Technological Laboratory, for testing, samples of fair average cotton of the commercial crop.

Sample No.	Cotton.	Season.
1130	A. R. Kampala (K.L.A.)	1930-31
1498	A. R. Kampala (K.L.A.)	1931-32
1898	A. R. Kampala (K.L.A.)	1932-33
2464	A. R. Kampala (K.L.A.)	1933-34
2848	A. R. Kampala (B.K.T.)	1934-35
3396	A. R. Kampala (K.L.A.)	1935-36

I.—SPINNING TESTS.

1. Treatment :—

(a) *Blow-room*.—Upto 1933-34 (inclusive):—Porcupine, Crighton (twice), Hopper, Scutcher (3 times). The 1930-31 sample was passed only once through the Crighton.

1934-35 and 1935-36:—Hopper bale opener, Horizontal cleaner, Crighton, Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (twice).

(b) *Card-room*:—Upto 1933-34 (inclusive):—Card, Drawing (2 heads), Slubber, Inter-Rover and spun from single hank roving on Ring Frame No. 1. 1934-35 and 1935-36:—As above, but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a hand drive arrangement.

2. Spinning Master's Report :—

(a) Cotton :—

	KAMPALA.					
	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Colour	White to creamy-white; bright.	Creamy-white; brightish.	White; bright.	White to creamy-white; bright.	White to creamy-white.	White to creamy-white; brightish.
Cleanliness	Clean.	Very clean.	Clean.	Clean.	Clean.	Clean.
Feel	Good silky.	Good silky.	Good silky.	Smooth bodied.	Good smooth.	Good silky.
Ginning and neppiness.	Triflo too knotted and nepped.	A little knotted.	Some with a knotted.	Well-ginned.	Well-ginned.	Well-ginned.
Seeds	Clean.	Clean.	Clean and silky.	Clean.	Clean.	Clean.
Card Sliver	Fairly neppy.	A little neppy.	A little neppy.	A little cloudy.	Good even.	Good.
Card Web	19.3 grams.	19.2 grams.	21.5 grams.	25.2 grams.	14.2 grams.	12.7 grams.
Weight of 10 flat strips.	..	..	..	..	..	..
Remarks .. ..	..	..	..	..	..	..

(b) Yarn :—

	KAMPALA.					
	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Cleanliness	Clean.	Clean.	Clean.	Clean.	Clean.	Clean.
Evenness	Even.	Even.	Very even.	Very even.	Very even.	Very even.
Neppiness	Some with a neppy.	A triflo neppy.	Practically free of nep.	Fairly neppy.	Nep-free.	Some with a neppy.
Remarks .. ..	..	..	..	..	..	..

3. Spinning Test Details and Results :—See Table 24 on page 72.

II.—REPORT OF THE SPECIAL APPEAL COMMITTEE ON AFRICAN A. R. KAMPALA COTTON.

		Kampala.			
		1929-31.	1931-32.	1932-33.	1933-34.
Contract valued under	.. ..	E. G. M. G. Branch No. 2	E. G. M. G. Branch No. 2	E. G. M. G. Branch No. 2	E. G. M. G. Branch No. 2
		April/May 1931	April/May 1932	April/May 1933	April/May 1934
Class .. ..	.. ..	Superfine ..	Fully good ..	.. ..	.. ..
Colour .. ..	.. ..	White ..	Bright ..	.. ..	.. ..
Staple Length .. ..	.. ..	1.16" ..	1.16" ..	1.16" ..	1.16" ..
Staple Strength .. ..	.. ..	Good ..	Fair ..	.. ..	.. ..
Regularity .. ..	.. ..	Regular ..	Regular ..	.. ..	.. ..
Value above or below contract rate	.. ..	Rs. 115 on ..	Rs. 115 on ..	Rs. 115 on ..	Rs. 115 on ..
Basis .. ..	.. ..	Rs. 177 ..	Rs. 177 ..	Rs. 177 ..	Rs. 177 ..
Date of Valuation .. ..	.. ..	10.7.31 ..	10.7.32 ..	10.7.33 ..	10.7.34 ..
Remarks* .. ..	.. ..	Good sample ..	Good sample ..	Good sample ..	Good sample ..

* The difference between 'Fair' and 'Fully good' is 10% and 10% in 1933-34 Rs. 2.

Table 24.—SPINNING TEST RESULTS FOR KAMPALA COTTON.

Sample No.	Cotton.	Season.	Date of Spinning.	Counts Nominal.	Weight of sample (lbs.).	WASTE PERCENTAGES.				RISO FRAME PARTICULARS.*				YARN TEST RESULTS.										TEMPERATURE (°F.).	RELATIVE HUMIDITY. (%).	Testing Room.
						Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss.†	Yarn breakages per 100 spindles	Front Roller Speed R. P. M.	Spindle Speed R. P. M.	Draft.	Turns per inch.	TENSILE.			Reinforces Class.	Keps per yard.	Turns per inch Actual.	Spinning Room.	Spinning Room.				
															Counts Actual.	Strength (lbs.)	Count-Strength Product.						Counts Actual.				Work of Ringer (inch-lb.).	Count-Product.
1130	Kampala	1030-31	20-7-31	20	10	4.1	10.3	0.4	14.3	10	105	0750	5.75	17.03	10.3	113.0	2242	10.3	201.3	3304	2.7	17.2	87	73	82	
1130	Kampala	1030-31	20-7-31	30		..	..	..	..	0	159	0930	0.70	21.50	20.9	03.2	1049	20.8	107.2	3184	4.3	21.2	80	79	85
1130	Kampala	1030-31	30-7-31	40		..	..	..	..	8	133	0700	8.03	23.28	30.3	43.8	1730	30.5	80.2	3108	3.5	24.0	80	78	83
1408	Kampala	1031-32	10-10-32	20	10	3.0	10.4	0.3	14.1	0	190	0800	5.81	17.08	20.2	100.6	2153	20.2	103.4	3307	2.2	17.2	82	63	00	
1408	Kampala	1031-32	10-10-32	30		..	..	..	..	0	102	0700	0.41	21.50	20.3	63.4	1870	20.2	103.2	3150	2.2	21.3	87	68	07
1408	Kampala	1031-32	11-10-32	40		..	..	..	..	18	139	0700	8.07	23.28	40.3	38.7	1367	30.3	74.2	3016	3.0	24.2	87	07	01
1808	Kampala	1032-33	5-8-33	20	10	3.4	10.0	0.4	14.1	47	105	0900	0.07	17.08	20.6	91.4	1883	20.0	173.8	3083	1.2	17.3	86	75	70	
1808	Kampala	1032-33	9-0-33	30		..	..	..	..	3	160	0930	0.03	21.80	20.3	63.2	1023	20.8	111.0	3250	1.3	21.1	85	77	70
1808	Kampala	1032-33	0-9-33	40		..	..	..	..	15	128	0630	8.02	23.28	40.3	41.4	1003	30.0	81.0	3252	1.8	24.4	80	70	70
2464	Kampala	1033-34	31-8-34	20	10	3.0	12.0	0.1	17.1	6	205	10000	5.48	17.08	20.2	108.7	2196	20.2	103.4	3017	3.3	17.1	87	70	82	
2461	Kampala	1033-34	31-8-34	30		..	..	..	..	0	163	10000	0.63	21.80	30.0	03.7	1971	20.9	108.4	3242	4.2	20.7	80	71	82
2404	Kampala	1033-34	31-8-34	40		..	..	..	..	2	144	0800	8.71	23.28	30.2	44.1	1720	38.2	82.0	3150	5.2	24.3	86	72	80
2401	Kampala	1033-34	30-8-34	50		..	..	..	..	4	131	10000	10.10	29.10	40.7	31.2	1351	40.3	52.8	2003	4.8	27.1	86	72	81
2848	Kampala	1034-35	10-9-35	30	10	3.1	9.8	0.3	12.9	7	160	0850	7.00	21.80	20.7	04.6	1910	30.1	108.0	3251	0.8	21.1	85	70	70	
2848	Kampala	1034-35	11-9-35	40		..	..	..	..	13	138	0900	7.07	23.28	30.4	43.7	1722	30.2	88.0	3450	0.3	24.5	83	77	77
2848	Kampala	1034-35	13-9-35	50		..	..	..	..	14	120	0900	10.19	29.10	50.1	30.1	1503	30.0	53.8	2090	0.8	27.1	83	70	07
3300	Kampala	1035-30	9-10-30	30	10	3.4	9.3	0.2	11.0	0	173	10300	7.14	21.86	30.0	64.2	1084	31.1	104.2	3241	2.5	20.9	89	71	90	
3306	Kampala	1035-30	12-10-30	40		..	..	..	..	0	149	10400	7.81	23.28	40.1	43.3	1736	40.4	80.2	3240	3.0	24.1	88	65	02
8300	Kampala	1035-30	13-10-30	50		..	..	..	..	5	138	10400	10.00	29.10	50.3	51.4	1636	52.1	62.0	3230	2.8	20.0	88	71	06

* Diameter of ring frame front roller: $\frac{1}{2}$ ". Diameter of rings: 1- $\frac{1}{2}$ ".

† It is to be noted that the total loss is for a small sample weighing 10 lbs.; for bulk sample spun under mill conditions it would be less than shown here.

25.—A. R. BUSOGA COTTON.

These samples have been very kindly supplied by the East India Cotton Association, after inspection and approval by their Special Appeal Committee on African Cottons, in accordance with an arrangement made with the Association to supply to the Technological Laboratory, for testing, samples of fair average cotton of the commercial crop.

Sample No.	Cotton.	Season.
1131	A. R. Busoga (K.G.I.)	1930-31.
1499	A. R. Busoga (N.S.S.)	1931-32.
1897	A. R. Busoga (K.A.L.)	1932-33.
2463	A. R. Busoga (N.W.D.)	1933-34.
2847	A. R. Busoga (K.A.L.)	1934-35.
3395	A. R. Busoga (N.S.S.)	1935-36.

I.—SPINNING TESTS.

1. Treatment :—

(a) *Blow-room*.—Upto 1933-34 (inclusive):—Porcupine, Crighton (twice), Hopper, Scutcher (3 times). The 1930-31 sample was passed only once through the Crighton.

1934-35 and 1935-36:—Hopper bale opener, Horizontal Cleaner, Crighton (once), Gridded dust-trunks, Cage exhaust, Hopper feeder, Scutcher (twice).

(b) *Card-room*.—Upto 1933-34 (inclusive):—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1. 1934-35 and 1935-36:—As above, but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) Cotton :—

	BUSOGA.					
	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Colour	Creamy-white; very bright.	Brightish creamy-white.	White to creamy-white; brightish.	Creamy-white; bright.	Creamy-white; bright.	White to creamy-white; brightish.
Cleanliness	Clean	A few spots of stain.	Fairly clean ..	Clean	Clean	Clean.
Feel	Soft and silky.	Soft silky ..	Soft silky ..	Smooth-bodied.	Silky	Good silky.
Ginning and neppiness.	Knotted and nepped.	Some what knotted.	Fairly well-ginned.	Fairly knotted.	Well-ginned ..	Well-ginned.
Seeds	Too much cut.	.. ..	.. ..	.. ..	.. ..	.. ..
Card Sliver	Clean	Clean	Silky, bright and clean.	Clean	Clean	Clean ..
Card Web	Much too neppy and uneven.	A trifle neppy.	Good	A little neppy.	Good	Good.
Weight of 10 flatstrips.	20.7 grams ..	18.4 grams ..	20.1 grams ..	22.5 grams ..	19.6 grams ..	14.4 grams.
Remarks .. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..

(b) Yarn :—

	BUSOGA.					
	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Cleanliness	Clean	Clean	Clean	Clean	Clean	Clean.
Evenness	Even	Very even ..	Very even in the two lower counts.	Even	Even	Fairly even.
Neppiness	Fairly neppy ..	A little neppy.	Almost free of nep.	Fairly neppy ..	Fairly neppy ..	Neppy.
Remarks .. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..

3. Spinning Test Details and Results :—See Table 25 on page 75.

II. REPORT OF THE SPECIAL APPEAL COMMITTEE ON AFRICAN A. R. BUSOGA COTTON.

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BUSOGA.					
	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.
Contract valued under
	F. G. M. G. Broach No. 2	F. G. M. G. Broach No. 2	F. G. M. G. Broach No. 2	F. G. M. G. Broach H.C.F. G. M. G. Broach	F. G. M. G. Broach
	April/May 1933 dely.	April/May 1933 dely.	July/Aug. 1933 dely.	No. 2; July/August No. 2, April/May 1936	Hedge Contract No. 2, April/May 1937 dely.
Class ..	Superfine ..	Fully good ..	Fine ..	Fully good to fine ..	Strict fine ..
Colour ..	White ..	Creamy-white ..	Dull-white ..	Dull-white and creamy ..	Creamy-white ..
Staple Length ..	1 1/8" ..	1 1/16" ..	1 1/16" ..	1 1/16" ..	Full 1 1/16" ..
Staple Strength ..	Good ..	Fair ..	Good ..	Good ..	Good ..
Regularity ..	Regular ..	Rather irregular ..	Fairly regular ..	Regular ..	Regular ..
Value above or below contract rate	Rs. 110 on ..	Rs. 105 on ..	Rs. 138 on ..	Rs. 137 on ..	Rs. 127 on ..
Basis ..	Rs. 177 ..	F. G. M. G. Broach No. 2, April/May 1933 dely., Rs. 218.	F. G. M. G. Broach No. 2, July/August 1933 dely., Rs. 205.	F. G. M. G. Broach H.C.F. G. M. G. Broach H.C.F. G. M. G. Broach H.C. No. 2, April/May 1936 dely., Rs. 194.	F. G. M. G. Broach H.C. No. 2, April/May 1937 dely., Rs. 221.
Date of Valuation ..	16-7-31 ..	5-10-32 ..	7-8-33 ..	16-9-34 ..	28-9-35.
Remarks*	..	Fair average sample ..	..	..	Pass A. R. Busoga.

* The difference between 'Pass' and 'Rejection' standards in 1935-36 is Rs. 7.

Table 25.—SPINNING TEST RESULTS FOR BUSOGA COTTON.

Sample No.	Cotton.	Secon.	Date of Spinning.	Counts Normal.	Weight of sample (lbs.)	WASTE PERCENTAGES.				RING FRAME PARTICIPATIONS*						YARN TEST RESULTS.					FIBER STRENGTH (CF)		FIBER STRENGTH (CF)	
						Flow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss†	Yarn Breakages per 100 spindles per hour.	Rings per spindle at 12 P.M.	Spindle speed at 12 P.M.	Draft.	Turns per inch	Lev.	Blastic		Machine Class.	Net per cent.	Furns per inch Actual.	Spinning Room.	Fiber Room.	Spinning Room.	Fiber Room.
																Count Actual.	Count Standard (the 10)	Count Standard (the 10)	Count Actual.	Count Standard (the 10)	Count Standard (the 10)	Count Actual.	Count Standard (the 10)	Count Standard (the 10)
1131	Busoga	..	29-7-31	20	8	5.3	12.3	0.0	17.4	20	135	9750	5.51	17.94	117.7	2250	100.0	20.0	10.0	117.7	2250	100.0	117.7	2250
1131	Busoga	..	29-7-31	30		..	..	..	..	0	130	9650	0.07	21.90	20.5	20.5	112.0	20.5	112.0	20.5	20.5	112.0	20.5	20.5
1131	Busoga	..	30-7-31	40		..	..	..	..	21	124	9700	8.59	23.94	17.0	17.0	82.0	23.9	82.0	23.9	23.9	82.0	23.9	23.9
1409	Busoga	..	1031-32	20	10	5.0	9.0	0.4	15.3	26	190	9700	5.55	17.94	107.0	2253	100.0	20.0	107.0	2253	100.0	107.0	2253	100.0
1409	Busoga	..	1031-32	30		..	..	..	..	10	161	9700	0.34	21.90	70.7	2022	112.0	20.0	112.0	20.0	20.0	112.0	20.0	20.0
1409	Busoga	..	1031-32	40		..	..	..	..	5	129	9700	8.51	23.94	45.1	1751	70.0	20.0	70.0	20.0	20.0	70.0	20.0	20.0
1807	Busoga	..	1012-33	20	10	7.5	10.0	0.5	17.1	88	169	9670	5.35	17.94	85.9	1771	100.0	20.0	85.9	1771	100.0	85.9	1771	100.0
1807	Busoga	..	1012-33	30		..	..	..	..	31	160	9600	0.17	21.90	54.8	1568	111.0	20.0	111.0	20.0	20.0	111.0	20.0	20.0
1807	Busoga	..	1012-33	40		..	..	..	..	21	124	9650	8.71	23.94	37.9	1411	71.2	20.0	71.2	20.0	20.0	71.2	20.0	20.0
2403	Busoga	..	1033-34	20	10	5.3	11.1	0.2	16.3	0	202	9800	5.41	17.94	111.5	2253	100.0	20.0	111.5	2253	100.0	111.5	2253	100.0
2403	Busoga	..	1033-34	30		..	..	..	..	3	169	9800	0.17	21.90	65.9	1791	101.0	20.0	101.0	20.0	20.0	101.0	20.0	20.0
2403	Busoga	..	1033-34	40		..	..	..	..	7	144	9700	8.75	23.94	40.9	1677	75.1	20.0	75.1	20.0	20.0	75.1	20.0	20.0
2403	Busoga	..	1033-34	50		..	..	..	..	2	131	9700	10.19	23.94	31.0	1571	51.0	20.0	51.0	20.0	20.0	51.0	20.0	20.0
2847	Busoga	..	1014-35	20	10	3.8	11.7	0.1	15.4	17	161	9650	7.79	21.90	12.1	2161	111.5	20.0	111.5	20.0	20.0	111.5	20.0	20.0
2847	Busoga	..	1014-35	40		..	..	..	..	5	138	9550	9.09	23.94	46.1	1413	87.8	20.0	87.8	20.0	20.0	87.8	20.0	20.0
2847	Busoga	..	1034-35	50		..	..	..	..	24	125	9650	10.06	23.94	32.8	1607	60.5	20.0	60.5	20.0	20.0	60.5	20.0	20.0
3305	Busoga	..	1035-30	20	10	3.8	9.5	0.3	13.2	7	171	10350	7.14	21.90	71.9	2107	100.1	20.0	100.1	20.0	20.0	100.1	20.0	20.0
3305	Busoga	..	1015-30	40		..	..	..	..	0	149	10100	7.25	23.94	50.0	1975	87.2	20.0	87.2	20.0	20.0	87.2	20.0	20.0
3305	Busoga	..	1035-30	50		..	..	..	..	5	140	10370	9.51	23.94	35.1	1770	66.6	20.0	66.6	20.0	20.0	66.6	20.0	20.0

* Diameter of ring frame front roller—7/8". Diameter of rings—1.5/8".

† It is to be noted that the total loss is for a small sample weighing 10 lbs.; for bulk sample spun under mill conditions it would be less than shown here.

26.—A. R. JINJA COTTON.

These samples have been very kindly supplied by the East India Cotton Association, after inspection and approval by their Special Appeal Committee on African Cottons, in accordance with an arrangement made with the Association to supply to the Technological Laboratory, for testing, samples of fair average Cotton of the commercial crop.

Sample No.	Cotton.	Season.
1133	A. R. Jinja (K.I.G.)	1930-31
1500	A. R. Jinja (K.U.M.)	1931-32
1896	A. R. Jinja (A.R.A.)	1932-33
2462	A. R. Jinja (R.N.P.)	1933-34
2846	A. R. Jinja (S.R.I.)	1934-35
3394	A. R. Jinja (S.R.I.)	1935-36

I.—SPINNING TESTS.

1. Treatment :—

(a) *Blow-room*.—Upto 1933-34 (inclusive):—Porcupine, Crighton (twice), Hopper, Scutcher (3 times); the 1930-31 sample was passed only once through the Crighton.

1934-35 and 1935-36 :—Hopper bale opener, Horizontal cleaner, Crighton (once), Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (twice).

(b) *Card-room*.—Upto 1933-34 :—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. I.

1934-35 and 1935-36 :—As above, but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles while Ring Frame No. I possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) Cotton :—

	JINJA.					
	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Colour	Creamy-white; bright.	Creamy-white.	White to creamy-white; brightish.	White to creamy-white; bright.	White to creamy-white; bright.	White to creamy-white; brightish.
Cleanliness	Fairly clean.	Fairly clean.	..	Clean.	Fairly clean.	Clean.
Feel	Soft and silky.	Good softish.	Soft silky.	Good silky.	Good silky.	Good silky.
Ginning and neppiness.	Too much knotted and nepped.	Some-what knotted.	Fairly well-ginned.	A little knotted.	A good deal knotted and nepped.	Well-ginned.
Seeds .. ..	..	..	..	..	..	..
Card Sliver	Clean.	Clean.	Silky, soft and clean.	Clean.	Clean.	Clean.
Card Web	Too nappy.	A little neppy.	Good.	Cloudy and neppy.	Some-what neppy.	Good.
Weight of 10 flat strips.	20.0 grams.	18.3 grams.	19.5 grams.	26.2 grams.	19.5 grams.	17.0 grams.
Remarks .. ..	..	..	..	..	..	..

(b) Yarn :—

	JINJA.					
	1930-31	1931-32	1932-33	1933-34	1934-35	1935-36
Cleanliness	Fairly clean	Clean.	Clean.	Clean.	Fairly clean.	A trifle leafy.
Evenness	Even.	Even.	Very even.	Even.	Even.	Fairly even.
Noppiness	Nappy.	Some-what nappy.	Practically free of nep.	Fairly nappy.	Nappy.	Nappy.
Slubbiness .. ..	..	..	..	..	Occasionally slubby.	..
Remarks .. ..	..	..	..	..	..	..

3. Spinning Test Details and Results :—See Table 26 on page 78.

II. REPORT OF THE SPECIAL APPEAL COMMITTEE ON AFRICAN COTTON, A. R. JINJA.

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JINJA.						
	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Contract valued under	F. G. M. G. Broach No. 2.	F. G. M. G. Broach No. 2, April/ May 1933 delv.	F. G. M. G. Broach No. 2, July/ August 1933 delv.	F. G. M. G. Broach H. C. No. 2, July/August 1934.	F. G. M. G. Broach Hedge con- tract No. 2, April/May 1936 delivery.	F. G. M. G. Broach Hedge Con- tract No. 2, April/May 1937 delivery.
Class
Colour
Staple Length
Staple Strength
Regularity
Value above or below contract rate
Basis
Date of Valuation
Remarks *

* The difference between 'Pass' and 'Rejection' standards in 1935-36 is Rs. 7/-.

Table 26.—SPINNING TEST RESULTS FOR JINJA COTTON.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
Sample No.	Cotton.	Section.	Date of Spinning.	Counts Nominal.	Weight of Sample (lbs.)	WASTE PERCENTAGES.				RING FRAME PARTICULARS.*				YARN TEST RESULTS.										TEMPERATURE.		RELATIVE HUMIDITY. (%)
						Draw Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss.†	Yarn Breakages per 100 spindles	Front Roller Speed R.P.M.	Spindle Speed R.P.M.	Draft.	Turns per Inch.	LEA.			BALISTIC.				Evenness Class.	Neps per yard.	Turns per Inch Actual.	Spinning Room.	
															Counts Actual.	Strength (lbs.)	Count Strength Product	Counts Actual.	Work of Sample (inches-lb.)	Count Product						
1133	Jinja	1030-31	30-7-31	20	10	5.3	11.2	0.3	16.2	6	106	9700	0.07	17.98	109.3	2153	20.1	185.6	3721	2	6.2	17.0	84	82	88	
1133	Jinja	1030-31	31-7-31	30						7	100	9700	0.80	21.86	64.3	1852	29.7	105.0	3118	4	7.0	20.7	85	80	70	
1133	Jinja	1030-31	31-7-31	40						13	138	9050	9.26	25.28	40.4	1584	40.4	74.8	3022	5	7.0	24.0	84	80	78	
1500	Jinja	1031-32	12-10-32	20	10	6.9	9.5	0.4	10.4	62	100	9700	0.07	17.98	112.4	2214	19.6	192.0	3821	3	5.5	17.6	89	65	68	
1500	Jinja	1031-32	11-10-32	30						14	163	9700	0.54	21.86	20.6	1098	20.1	110.2	3406	4	0.0	21.6	88	63	68	
1500	Jinja	1031-32	12-10-32	40						10	138	9750	8.70	25.28	39.5	1098	38.1	77.4	2940	5	5.5	24.7	86	62	68	
1806	Jinja	1032-33	5-0-33	20	10	5.0	9.8	0.4	13.5	88	106	9650	6.80	17.08	80.3	1707	20.5	173.4	3500	2	1.8	17.3	86	74	78	
1806	Jinja	1032-33	5-0-33	30						3	160	9600	6.38	21.86	68.1	1065	26.4	114.2	3357	3	2.0	21.1	87	74	77	
1806	Jinja	1032-33	8-0-33	40						2	138	9650	8.67	25.28	38.0	1583	30.4	79.4	3128	4	1.5	24.3	80	75	80	
2402	Jinja	1033-34	28-8-34	20	10	5.0	13.0	0.2	18.0	0	202	9600	0.05	17.08	20.3	2238	20.2	100.0	3656	2	5.0	17.2	86	70	70	
2402	Jinja	1033-34	28-8-34	30						0	166	9000	0.54	21.86	29.7	2150	29.6	115.4	3410	3	4.5	21.3	86	71	77	
2402	Jinja	1033-34	29-8-34	40						10	144	9000	8.93	25.28	42.2	1780	41.7	77.0	3230	4	4.5	24.0	86	70	72	
2402	Jinja	1033-34	30-8-34	50						2	131	9000	10.10	28.16	51.3	1057	50.7	53.2	2997	5	4.7	27.4	80	73	74	
2840	Jinja	1034-35	18-0-35	30	10	5.0	11.0	0.4	16.3	10	183	9700	7.05	21.86	30.7	2057	30.5	107.4	3276	3	5.5	20.7	85	69	68	
2840	Jinja	1034-35	16-0-35	40						22	138	9000	7.94	25.28	30.7	1886	39.5	90.4	3571	4	5.0	24.2	84	80	73	
2840	Jinja	1034-35	17-0-35	50						10	124	9000	10.20	28.16	51.5	1643	50.5	53.0	2676	5	5.2	26.6	84	80	69	
3304	Jinja	1035-36	8-10-36	30	10	4.4	10.7	0.4	14.0	7	170	10300	7.35	21.86	31.0	2186	31.1	109.4	3402	4	4.0	21.2	88	72	70	
3304	Jinja	1035-36	10-10-36	40						2	143	10350	7.58	25.28	39.3	1096	39.3	80.4	3300	4	3.8	24.4	88	72	69	
3304	Jinja	1035-36	12-10-36	50						5	133	10400	10.00	28.16	50.0	1786	50.8	60.4	3373	5	4.2	27.3	87	71	66	

* Diameter of ring frame front roller: 7/8". Diameter of rings: 1 1/8".

† It is to be noted that the total loss is for a small sample weighing 10 lbs.; for bulk sample spun under mill conditions it would be less than shown here.

1.—FARM WESTERNS COTTON.

These samples have been tested by arrangement with the Bombay Millowners' Association, Bombay, who have very kindly agreed to arrange for the supply each season of samples of the first arrivals of the new crop.

Sample No.	Cotton.	Place.	Season.
1776	Farm Westerns	Bellary	1932-33
2374	Farm Westerns	Bellary	1933-34
2748	Farm Westerns	Adoni	1934-35
3150	Farm Westerns	Adoni	1935-36

I. SPINNING TESTS.

1. Treatment :—

(a) *Blow-room*.—Upto 1933-34 :—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).

1934-35 and 1935-36 :—Hopper bale opener, Horizontal cleaner, Crighton (once), Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).

(b) *Card-room*.—Upto 1933-34 :—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.

1934-35 and 1935-36 :—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) Cotton :—

—	FARM WESTERNS.			
	1932-33.	1933-34.	1934-35.	1935-36.
Colour	White to creamy-white.	Creamy-white.	Creamy-white.	White to creamy-white.
Cleanliness	Leafy.	Very leafy (very fine leaf).	Leafy.	Fairly leafy.
Feel	Softish.	Good smooth.	Good.	Softish.
Ginning and neppiness	A trifle knotted.	Well-ginned.	Somewhat knotted.	A little knotted by ginning.
Seeds	A few seeds.	Too many (2.40%) seeds.	..	..
Card Sliver	Clean.	Leafy.	Clean.	Clean and soft.
Card Web	Even and nep-free.	Good.	Good.	Good.
Weight of 10 flat strips.	17.6 grams.	21.5 grams.	17.8 grams.	13.8 grams.
Remarks .. ..	..	..	..	..

(b) Yarn :—

—	FARM WESTERNS.			
	1932-33.	1933-34.	1934-35.	1935-36.
Cleanliness	Clean.	Leafy.	Clean.	Almost clean.
Evenness	Fairly even.	Fairly uneven.	Even.	Fairly even.
Neppiness	A little neppy.	A little neppy.	Almost free of nep.	Practically free of nep.
Slubbiness .. ..	..	..	..	..

3. Spinning Test Details and Results :—See Table 1 on page 81.

TECHNOLOGICAL REPORTS
ON
COTTONS SUPPLIED BY
THE BOMBAY MILLOWNERS' ASSOCIATION.

These samples are the first arrivals of the new crop of each season. In view of the fact that sometimes a mill using a particular style of cotton in one season does not use the same style in the following season, a certain amount of discontinuity has occurred in some of the varieties. However, so far as possible, efforts have been made to obtain, in each season, samples of the same varieties so that the results of tests in the successive seasons may be comparable. As regards the valuation of these samples, this was kindly done by the Grader (Major Ellis Jones) upto 1931-32, but in the following seasons the mills supplying these samples were requested to furnish their own valuation reports.

Table 1.—SPINNING TEST RESULTS FOR FARM WESTERNS COTTON.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27		
Sample No.	Cotton.	Season.	Date of Spinning.	Counts Nominal.	Weight of Samples, lbs.	WASTE PERCENTAGES.				RING SPINNING PARTICULARS.						YARN TEST RESULTS.										RELATIVE HUMIDITY (%).	Spinning Room.	RELATIVE HUMIDITY (%).
						Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss, †	Yarn Breakages per 100 spindles per hour.	Krupp Roller speed R.P.M.	Spinning speed R.P.M.	Draft.	Turns per inch.	Count Actual.	Strength (lb.)	Count Strength Product.	Count of Haplines (th lb.)	Count Work (th lb.)	Count Work (th lb.)	Twists per card.	Twists per inch.						
1776	Farm Westerns.	1932-33	18-5-33	26	10	11.2	10.0	0.5	20.6	82	106	9650	5.11	17.94	19.5	72.5	1453	20.1	110.0	2233	1	2.2	17.1	70				
1776	Farm Westerns.	1932-33	18-5-33	24	..	..	..	..	..	92	174	9100	6.32	19.73	21.7	31.3	1292	21.0	95.4	2350	1	2.5	18.9	63
2374	Farm Westerns.	1933-34	10-7-34	20	10	15.0	11.9	0.5	25.5	20	190	8690	6.07	17.94	19.0	69.1	1391	19.7	117.9	2221	4	1.5	17.0	70				
2374	Farm Westerns.	1933-34	11-7-34	24	..	..	..	..	..	50	170	8150	5.45	17.75	22.2	5.3	1291	22.5	90.0	2276	5	1.5	19.0	73
2374	Farm Westerns.	1933-34	10-7-34	30	..	..	..	..	..	56	154	8690	6.71	22.11	30.0	10.1	1212	29.5	78.1	2313	6	2.0	22.2	40
2748	Farm Westerns.	1934-35	19-6-35	20	10	11.2	9.6	0.5	20.2	21	197	9650	5.95	17.94	19.7	82.9	1712	19.8	111.5	2505	3	1.5	17.5	80				
2748	Farm Westerns.	1934-35	19-6-35	24	..	..	..	..	..	45	180	9600	5.32	19.71	21.6	64.1	1607	22.7	111.1	2711	4	1.5	19.1	79
2748	Farm Westerns.	1934-35	20-6-35	30	..	..	..	..	..	30	150	8500	6.71	22.11	29.3	52.4	1515	29.7	92.4	2711	5	1.2	22.1	77
3150	Farm Westerns.	1935-36	23-4-36	20	10	9.1	8.2	0.0	10.0	42	195	8800	5.85	17.85	19.2	61.7	1727	19.6	123.4	2107	4	0.8	17.1	70				
3150	Farm Westerns.	1935-36	23-4-36	24	..	..	..	..	..	73	170	9000	5.51	19.73	21.9	41.8	1116	21.5	101.0	2518	1	0.9	19.1	72
3150	Farm Westerns.	1935-36	21-4-36	30	..	..	..	..	..	66	140	8750	9.76	22.93	29.5	39.3	1211	20.0	78.1	2312	5	1.0	22.1	70

* Diameter of ring frame front roller: 1". Diameter of rings: 11".

† It is to be noted that the total loss is for a small sample weighing 10 lbs.; for bulk sample spun under mill conditions it would be less than shown here.

2.—BAILHONGAL COTTON.

These samples have been tested by arrangement with the Bombay Millowners' Association, Bombay, who have very kindly agreed to arrange for the supply each season of samples of the first arrivals of the new crop.

Sample No.	Cotton.	Season.	Weight (lbs.)
1042	Bailhongal	1930-31	12
1315	"	1931-32	12
1775	"	1932-33	11
2371	"	1933-34	11
2743	Bailhongal Compta	1934-35	11
3147	Bailhongal	1935-36	11

I. SPINNING TESTS.

1. *Treatment*:—
 - (a) Blow-robm.—Upto 1933-34 :—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).
1934-35 and 1935-36 :—Hopper bale opener, Horizontal cleaner, Crighton (once), Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).
 - (b) Card-room.—Upto 1933-34 :—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.
1934-35 and 1935-36 :—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.
2. *Spinning Master's Report*:—
 - (a) *Cotton* :—

		Bailhongal.					
		1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Colour	.. ..	Creamy-white.	Dull white.	Dullish creamy-white.	Creamy-white.	White to creamy-white.	White to creamy-white.
Cleanliness	.. ..	Fairly leafy.	Leafy; almost free of stains.	Leafy—very fine leaf.	Very leafy.	Leafy (very fine leaf.)	Leafy.
Feel	.. ..	Good.	Soft.	Good.	Good.	Good.	Good.
Ginning and neppiness.		Well ginned.	Well ginned.	Well ginned.	Slightly knotted.	Well ginned.	Well-ginned.
Seeds	.. ..	1% ginned and partly ginned.	....	....	....	Contains too many unginned seeds.	....
Card Sliver	.. ..	Clean.	A little pin trash present.	A trifle leafy.	Fairly leafy.	Clean.	Clean.
Card Web	.. ..	Very good.	Even and nep-free	Even and nep-free	Good.	Even and nep-free.	Good.
Weight of ten flat strips		11.2 grams.	16.6 grams; dirty.	16.2 grams.	19.5 grams.	16.6 grams.	12.8 grams.
Remarks	.. ..	Fully pressed.	Fine staple.	Contains much very short fibre.	....	....	....

(b) *Yarn* :—

		Bailhongal.					
		1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Cleanliness	.. ..	Clean.	A trifle leafy.	Clean.	Almost clean.	Almost clean.	Clean.
Evenness	.. ..	Fairly even.	Even.	Fairly even.	Even in the two lower counts.	Fairly even.	Even.
Neppiness	.. ..	A little nappy.	Fairly free of nep	Free of nep.	Free of nep.	Practically free of nep.	Almost nep-free.
Slubbiness	.. ..	....	....	....	Slubby.	....	....
Remarks	.. ..	....	....	....	....	....	....

3. *Spinning Test Details and Results*.—See Table 2 on page 84.

II. GRADER'S REPORT* FOR BAILHONGAL COTTON.

		BAILHONGAL.					
		1930-31.	1931-32.	1932-33.*	1933-34*.	1934-35.	1935-36*.
Contract valued under	.. ..	Broach.	Broach/Kumpla.	Hedge Contract No. 5 southern.	Broach.	July/Aug. Broach.	Broach April/May.
Class	.. ..	Fully Good.	Fully Good.	Good M. G.	Fully Good.	Fully good to fine.	Fully good to fine.
Colour	.. ..	Reddish.	Reddish Lino.	Brownish.	Brownish.	Brownish white.	Brownish white.
Staple Length	.. ..	7".	31/32".	7".	13/16".	7".	13/16".
Staple Strength	.. ..	Fair.	Good.	Moderate.	Fair.	Fair.	Good.
Regularity	.. ..	Fair.	Fair.	Regular.	Fair.	Somewhat irregular.	Fair.
Value above or below contract rate	.. ..	Rs. 35 on.	Rs. 30 on.	Rs. 25 on.	Rs. 15 on.	Rs. 30 on.	Rs. 30 on.
Basis	.. ..	Rs. 100.	Rs. 170.	F. G. Broach April/May 1933.	Broach July/Aug. Rs. 203.	Rs. 232.	Rs. 203.
Date of Valuation	.. ..	11-5-31.	5-5-32.	15-5-33.	9-7-34.	3-7-35.	20-4-36.
Remarks	.. ..	....	....	Inferior in staple to last year's crop.	....	....	....

* Reports for 1932-33, 1933-34 and 1935-36 were made by the mill supplying the sample.

Table 2.—SPINNING TEST RESULTS FOR BAILHONGAL COTTON.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
Sample No.	Cotton.	Season.	Date of Spinning.	Counts Nominal.	Weight of Sample (lbs.)	WASTE PERCENTAGES.				RING FRAME PARTICULARS.*				YARN TEST RESULTS.										TEMPERATURE (°F.)	RELATIVE HUMIDITY. (%)	
						Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss. †	Yarn Breakages per 100 spindles per hour.	Front Roller Speed ft. p.m.	Spindle Speed ft. p.m.	Draft.	Turns per inch.	LEA.			BALESTIC.			Evenness Class.	Neps per yard.	Turns per Inch Actual.			
															Counts Actual	Strength (lbs.)	Count-Strength	Count-Work Product.	Work of Rupture (lb.)	Count-Work Product.						
1042	Bailhongal.	1930-31	4-5-31	20	10	12.2	8.2	0.3	10.7	0	188	9450	0.25	17.93	19.8	74.0	1483	114.4	2265	2265	2265	3	2.2	17.3	89	70
1042	Bailhongal.	1930-31	4-5-31	24	..	..	..	..	..	1	177	9300	3.95	19.73	23.4	81.0	1427	95.0	2257	2257	2257	4	1.5	10.0	91	70
1042	Bailhongal.	1930-31	8-5-31	30	..	..	..	..	..	52	157	9900	7.68	23.11	29.2	44.0	1283	76.8	2291	2291	2291	5	2.0	22.1	91	07
1315	Bailhongal.	1931-32	29-4-32	20	10	13.3	9.2	0.7	21.8	78	194	9650	5.45	17.98	20.2	67.4	1361	101.4	2151	2151	2151	3	1.8	17.5	90	66
1315	Bailhongal.	1931-32	29-4-32	24	..	..	..	..	..	109	173	9450	6.54	19.73	24.0	45.8	1127	87.8	2100	2100	2100	4	2.2	16.0	90	68
1315	Bailhongal.	1931-32	30-4-32	30	..	..	..	..	..	76	151	9600	6.70	23.11	28.0	44.3	1280	80.0	2260	2260	2260	5	2.5	22.2	89	70
1775	Bailhongal.	1932-33	18-5-33	20	10	15.6	10.2	0.6	24.7	119	196	9650	3.21	17.98	20.8	64.3	1325	107.0	2217	2217	2217	4	0.8	17.2	88	70
1775	Bailhongal.	1932-33	19-5-33	24	..	..	..	..	..	61	174	9100	0.02	16.73	27.8	31.2	1210	92.0	2107	2107	2107	4	1.0	18.9	87	66
2371	Bailhongal.	1933-34	9-7-34	20	10	13.8	11.2	0.4	23.8	36	200	9800	6.10	17.98	20.0	73.2	1464	110.8	2216	2216	2216	3	0.8	17.5	80	75
2771	Bailhongal.	1933-34	10-7-34	24	..	..	..	..	..	36	179	9600	5.47	19.73	23.1	64.1	1481	98.0	2337	2337	2337	4	1.0	16.3	87	78
2371	Bailhongal.	1933-34	10-7-34	30	..	..	..	..	..	102	154	9600	6.70	23.11	30.0	43.2	1322	76.8	2348	2348	2348	5	0.8	22.2	86	80
2743	Bailhongal.	1934-35	10-6-35	20	10	12.8	8.7	0.3	20.7	10	104	9300	3.81	17.98	20.0	63.8	1876	135.8	2730	2730	2730	4	0.8	17.4	90	73
2743	Bailhongal.	1934-35	1-6-35	24	..	..	..	..	..	27	165	8750	5.43	19.73	27.0	70.7	1810	117.0	2740	2740	2740	4	1.0	10.0	90	77
2743	Bailhongal.	1934-35	12-6-35	30	..	..	..	..	..	13	152	9650	6.76	23.11	28.6	61.8	1767	98.4	2864	2864	2864	5	0.8	22.6	90	82
3147	Bailhongal.	1935-36	17-4-36	20	10	10.0	7.1	0.4	17.6	47	192	9450	5.05	17.98	20.2	66.5	1343	119.4	2398	2398	2398	3	1.0	17.1	80	70
3147	Bailhongal.	1935-36	20-4-36	24	..	..	..	..	..	14	173	9300	6.41	19.73	23.0	50.8	1190	90.0	2285	2285	2285	4	1.2	18.7	80	72

* Diameter of ring frame front roller—7". Diameter of ring—14".

† It is to be noted that the total loss is for a small sample spun under mill conditions it would be less than shown here.

3.—BROACH COTTON.

These samples have been tested by arrangement with the Bombay Millowners' Association, Bombay, who have very kindly agreed to arrange for the supply each season of samples of the first arrivals* of the new crop.

Sample No.	Cotton.	Season.
1007	Broach (Salar)	1930-31
1314	" (Salar)	1931-32
1707	" (Sadhli)	1932-33
2372	" (Sadhli)	1933-34
2744	" (Broach)	1934-35
3148	" (Janibusar)	1935-36

NOTE—The mill supplying the sample explains that Sadhli is a station in the Broach District and Salar is merely the type name given by a seller to Sadhli or similar cotton.

*The 1935-36 sample does not represent the early arrivals of Broach but represents the average quality of the Broach Cotton.

I.—SPINNING TESTS.

1. Treatment :—

(a) *Blow-room*—Up to 1933-34 :—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).

1934-35 and 1935-36 :—Hopper bale opener, Horizontal cleaner, Crighton (once), Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).

(b) *Card-room*.—Up to 1933-34 :—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.

1934-35 and 1935-36 :—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

2. Spinning Master's Report.

(a) Cotton :—

	Broach.					
	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Colour	White to creamy-white.	Creamy-white.	White, bright.	White to creamy-white; bright.	White to creamy-white; bright.	White; bright.
Cleanliness	Very bright, clean.	Clean, almost free of leaf.	Almost clean.	Fairly clean.	Fairly clean.	Fairly clean.
Feel	Good silky.	Fairly good.	Good bodied.	Good.	Good smooth.	Smooth bodied.
Ginning and Neppiness	Well ginned.	Well ginned.	Well ginned.	Well ginned.	Well ginned.	Well ginned.
Seeds .. ..	..	..	..	..	..	..
Card Sliver	Clean.	Clean.	Clean.	Clean.	Clean.	Clean.
Card Web	First class.	Even and nep-free.	Even and nep-free.	Good.	Good.	Even and nep-free.
Weight of 10 flat strips.	12.6 grams.	10.2 grams.	15.2 grams.	17.5 grams.	21.6 grams.	17.5 grams.
Remarks	Fully pressed.	Medium fine staple, regular and fairly strong.	..	..	..	..

(b) Yarn :—

	Broach.					
	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Cleanliness	Clean.	Clean.	Clean.	Clean.	Clean.	A little leafy.
Evenness	Fairly even.	Fairly even.	Fairly even.	Fairly even.	Somewhat uneven.	Fairly even.
Neppiness	Free of nep.	Almost free of nep.	Free of nep.	Free of nep.	A trifle neppy.	Free of nep.
Slubbiness .. ..	..	..	Shows an occasional slub.	..	Slightly slubby.	..
Remarks .. ..	..	..	..	..	..	..

3. Spinning Test Details and Results.—See Table 3 on page 87.

II. GRADER'S REPORT* FOR BROACH COTTON.

		BROACH.				
		1930-31.	1931-32.	1932-33.	1933-34.	1934-35.
Contract valued under	.. ..	Broach.	Broach.	Hedge contract Broach F. G. No. 2. April/May 1933.	Broach.	Broach April/May.
Class	.. ..	Superfine.	Superfine.	Superfine.	Strict fine.	Superfine.
Colour	.. ..	White.	White with touch of cream.	White.	Slightly creamy.	Dull white; slightly stained.
Staple Length	.. ..	13/16"-7/8".	29/32".	3/4".	3/4".	11/16".
Staple Strength	.. ..	Fair.	Fair.	Moderate.	Fair.	Fair.
Regularity	.. ..	Fair.	Fair.	Somewhat irregular.	Fair.	Fair.
Value above or below contract rate	.. ..	Rs. 10 on.	Rs. 20 on.	Rs. 7 on.	Rs. 10 on Broach.	Rs. 0 on.
Basis	.. ..	Rs. 203.	Rs. 170.	F. G. Broach April/May.	Rs. 203 July/Aug. Broach.	Rs. 203.
Date of Valuation	.. ..	14-3-31.	5-5-32.	17-3-33.	9-7-31.	20-4-36.
Remarks	.. ..	....	....	This sample is deficient in staple and strength as compared with last year's crop.	....	....

* Reports for 1932-33, 1933-34 and 1934-35 were made by the mill supplying the sample.

Table 3.—SPINNING TEST RESULTS FOR BROACH COTTON.

Sample No.	Season:	Date of Spinning.	WASTE PERCENTAGES.				RING FRAME PARTICULARS.*						YARN TEST RESULTS.										RELATIVE HUMIDITY (%).	
			Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss. †	Weight of Sample (lbs.)	Counts Nominal.	Yarn Breakages per 100 spindles per hour.	Front Roller speed R. P. M.	Spindles per R. P. M.	Draft.	Turns per inch.	I.E.A.			BUILDING.			Machinery Class.	Webs per yard.	Turns per inch Actual.	Spinning Room.	Testing Room.
														Counts Actual.	Strength (lbs.)	Count-Strength Product.	Counts Actual.	Work of Machine (inch-lb.)	Count-Work Product.					
1007	1930-31	17-3-31	7.0	8.7	6.6	16.5	10	16A	7	184	8000	5.75	15.07	10.0	59.0	579	10.0	131.2	2912	3	1.2	15.5	81	00
1007	1930-31	17-3-31	..	..	..	..	..	20	50	180	10000	0.95	20.23	20.1	83.1	1163	20.5	104.4	2140	1	1.7	10.6	82	08
1314	1931-32	29-4-32	5.3	8.0	0.5	14.2	10	12	7	208	8000	4.30	13.02	12.0	63.3	1144	12.2	207.2	2298	4	1.5	13.4	88	72
1314	1931-32	28-4-32	..	..	..	..	..	16A	88	181	8100	5.00	15.07	10.1	57.0	932	10.2	130.0	2116	5	1.5	15.3	90	08
1314	1931-32	29-4-32	..	..	..	..	..	10B	62	190	6000	5.00	16.07	10.0	60.8	1117	15.3	134.4	2362	4	1.5	16.4	91	07
1707	1932-33	22-3-33	8.1	0.0	6.5	17.4	10	12	30	204	7606	5.25	13.02	12.4	80.3	906	12.4	109.2	2906	1	0.5	13.4	84	70
1707	1932-33	22-3-33	..	..	..	..	..	10A	121	175	7700	5.51	15.07	16.3	52.1	849	10.0	140.4	2312	5	0.5	15.5	85	71
1707	1932-33	22-3-33	..	..	..	..	..	10B	133	186	8700	5.33	16.07	16.1	65.0	1061	10.1	149.0	2353	5	0.5	10.4	80	70
2372	1933-34	7-7-34	6.0	9.7	0.4	10.2	10	14	51	200	8200	5.57	14.08	14.1	85.6	1207	14.2	170.0	2532	4	0.5	14.6	87	74
2372	1933-34	9-7-34	..	..	..	..	..	16A	48	188	8200	5.57	15.07	10.2	67.3	1090	10.4	137.4	2253	4	0.8	15.5	85	78
2372	1933-34	9-7-34	..	..	..	..	..	10B	36	198	8850	5.57	10.07	10.2	78.0	1273	10.5	130.8	2307	4	0.8	16.3	80	78
2744	1934-35	12-6-35	7.2	10.8	0.4	17.5	10	14	20	188	7600	5.55	14.08	14.2	70.8	1061	13.0	137.0	2608	4	1.8	14.7	00	09
2744	1934-35	13-6-35	..	..	..	..	..	16A	55	177	7006	5.48	15.07	10.6	70.0	1120	15.7	161.8	2540	5	2.0	15.4	01	07
2744	1934-35	13-6-35	..	..	..	..	..	10B	12	180	8200	5.54	10.07	15.7	83.0	1303	15.7	165.2	2504	5	1.5	10.4	00	08
3148	1935-36	24-4-36	6.0	0.8	6.4	10.3	10	10	9	108	6950	5.36	12.03	10.5	85.7	900	10.2	238.8	2436	4	0.5	12.1	88	00
3148	1935-36	23-4-36	..	..	..	..	..	14A	87	180	7450	5.45	14.08	14.2	55.1	782	14.1	181.0	2501	4	0.5	14.2	80	07
3148	1935-36	24-4-36	..	..	..	..	..	14B	58	200	8906	5.43	15.07	14.0	73.9	1035	14.3	175.2	2505	4	0.8	15.4	89	08

* Diameter of ring frame front roller— $\frac{1}{8}$ ". Diameter of rings— $\frac{1}{16}$ ".
† It is to be noted that the total loss is for a small sample weighing 10 lbs.; for bulk samples spun under mill conditions it would be less than shown here.

4.—KARUNGANNI COTTON.

These samples have been tested by arrangement with the Bombay Millowners' Association, Bombay, who have very kindly agreed to arrange for the supply each season of samples of the first arrivals of the new crop.

Sample No.	Cotton.	Season.
1063	Karunganni	1930-31
2413	Karunganni	1933-34
2746	Karunganni (Cambodia Dt.)	1934-35
3271	Karunganni	1935-36

1. Treatment :—

(a) *Blow-room*—Upto 1933-34 :—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).

1934-35 and 1935-36 :—Hopper bale opener, Horizontal cleaner, Crighton, Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).

(b) *Card-room*—Upto 1933-34 :—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.

1934-35 and 1935-36 :—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) Cotton :—

	KARUNGANNI.			
	1930-31.	1933-34.	1934-35.	1935-36.
Colour	Creamy-white; fairly bright.	White to creamy-white; bright.	White; bright.	White to creamy-white; brightish.
Cleanliness . . .	Fairly clean.	Fairly clean.	Fairly clean.	A little leafy.
Feel	Full-bodied.	Good smooth.	Good silky.	Good smooth.
Ginning and neppiness ..	A fair amount of knot and nep.	Well-ginned.	Well-ginned.	A little knotted.
Seeds	Some out seed.	..	Few crushed seeds.	..
Card sliver	Almost clean.	Fairly clean.	Clean; soft.	Almost clean.
Card web	Somewhat neppy and cloudy.	..	A little neppy.	A trifle neppy.
Weight of 10 flat strips ..	16.4 grams.	23.0 grams.	26.0 grams.	18.0 grams.
Remarks	Fully-pressed.	..	..	..

(b) Yarn :—

	KARUNGANNI.			
	1930-31.	1933-34.	1934-35.	1935-36.
Cleanliness	Fairly clean.	Almost clean.	Clean.	Little leafy.
Evenness	Fairly even.	Fairly even.	Even.	Fairly even.
Noppiness	Somewhat neppy.	A little neppy.	Neppy.	Somewhat neppy.
Slubbiness .. ..	..	A little slubby.	..	Occasionally slubby.
Remarks .. .. .	..	..	..	..

3. *Spinning Test Details and Results* :—See Table 4 on page 90.

II. GRADER'S REPORT* FOR KARUNGANNI COTTON.

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	1930-31.	1933-34.	1934-35.	1935-36.
Contract valued under	Broach.	July/August Broach.	Broach July/August.
Class	Fine.	Superfine.	Fine.
Colour	White.	Bright white.	White.
Staple Length	5/8-1 inch.	7/8 inch.	13/16 inch.
Staple Strength	Irregular.	Fair.	Fair.
Regularity	Very irregular.	Slightly irregular.	Slightly irregular.
Value above or below contract rate	Rs. 50 on.	Rs. 53 on.	Rs. 30 on.
Basis	Rs. 175.	Rs. 222.	Rs. 220.
Date of Valuation	30-5-31.	3-7-35.	1-7-36.
Remarks	Valued on name only.	Somewhat soft.	..

* Grader's Report for 1933-34 and 1935-36 is compiled by the mill supplying the sample.

Table 4.—SPINNING TEST RESULTS FOR KARUNGANNI COTTON.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
Sample No.	Cotton.	Season.	Date of Spinning.	Counts Normal.	Weight of Sample lbs.	WASTE PERCENTAGES.				RING FRAME PARTICULARS.*						YARN TEST RESULTS.						TEMPERATURE (°F).		RELATIVE HUMIDITY (%).		
						Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss.†	Yarn Breakages per 100 spindles per hour.	Front Roller Speed R.P.M.	Spindle Speed R.P.M.	Draft.	Turns per Inch.	LEA.			BALLISTIC.			Evenness Class.	Neps per yard.	Turns per Inch Actual.	Spinning Room.	Spinning Room.	Testing Room.
															Counts Actual.	Strength (lbs.)	Count-Strength Product.	Counts Actual.	Work of Machine (inch-lb.)	Count-Work Product.						
1063	Karunganni.	1930-31	28-5-31	20	10	7.2	9.2	0.8	16.2	35	187	9400	0.38	17.08	10.8	60.1	1190	10.9	23.7	110.8	2295	4	5.2	17.2	90	69
1063	Karunganni.	1930-31	28-5-31	24		..	..	..	..	44	174	9375	0.38	19.73	23.1	50.8	1173	23.7	04.8	2247	5	5.5	19.0	90	68	71
2413	Karunganni.	1933-34	1-8-34	20	10	6.9	11.7	0.4	18.1	42	186	9000	0.19	17.08	20.1	97.2	1351	20.2	23.5	110.9	2355	4	2.2	16.7	83	86
2413	Karunganni.	1933-34	1-8-34	24		..	..	..	..	77	168	8950	0.41	10.73	23.7	52.4	1242	23.5	100.2	2355	4	2.5	18.5	82	82	88
2746	Karunganni.	1934-35	17-6-35	20	10	7.8	13.0	0.3	20.0	19	194	9300	0.07	17.08	20.0	80.0	1720	10.9	23.0	139.8	2782	4	4.8	17.5	80	82
2746	Karunganni.	1934-35	17-6-35	24		..	..	..	..	23	176	9300	0.07	19.73	22.9	73.0	1635	23.0	110.4	2740	4	5.5	10.4	90	87	80
3271	Karunganni.	1935-36	13-7-36	20	10	8.8	9.6	0.3	17.7	9	193	9700	5.08	17.08	20.2	74.4	1393	10.7	127.4	2510	4	4.0	17.4	87	70	72
3271	Karunganni.	1935-36	16-7-36	24		..	..	..	..	18	174	9700	5.76	10.73	24.1	57.5	1388	24.1	104.0	2500	4	3.8	10.1	88	73	74
3271	Karunganni.	1935-36	16-7-36	30		..	..	..	..	26	155	9500	6.97	21.86	29.7	42.0	1247	29.9	85.0	2542	5	3.2	21.1	88	73	72

* Diameter of ring frame front roller—1½". Diameter of ring—1½".

† It is to be noted that the total loss is for a small sample weighing 10 lbs.; for bulk sample spun under mill conditions it would be less than shown here.

5.—NANDYAL COTTON.

These samples have been tested by arrangement with the Mill-owners' Association, Bombay, who have very kindly agreed to arrange for the supply each season of samples of the first arrivals of the new crop.

Sample No.	Cotton.	Season.	Weight (lbs).
1069	Nandyal	1930-31	11
2751	„ (Northern Cambodia).	1934-35	10

I. SPINNING TESTS.

1. *Treatment*.—The 1930-31 sample was passed through the Porcupine, Crighton (twice), Hopper, Scutcher (3 times), Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving in Ring Frame No. 1. The 1934-35 sample was passed through the Hopper bale opener, Horizontal cleaner, Crighton, Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times) in the blow-room and was spun on Ring Frame No. 3, which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement; otherwise its treatment was the same as for the cotton of the other season.

2. *Spinning Master's Report* :—(a) *Cotton* :—

	NANDYAL	
	1930-31.	1934-35.
Colour	Creamy-white.	White to creamy-white.
Cleanliness	Leafy (very fine leaf).	Slightly stained; Leafy.
Feel	Good; soft.	Good.
Ginning and Neppiness	Well-ginned; a little neppy.	Well-ginned.
Seeds .. .. .	....	....
Card Sliver	Clean.	Clean; soft.
Card Web	Trifle neppy.	Slightly neppy.
Weight of ten flat strips	15.8 grams.	25.8 grams.
Remarks	Staple regular in length and of good strength.	....

(a) *Yarn* :—

	NANDYAL	
	1930-31.	1934-35.
Cleanliness	Clean.	Clean.
Evenness	Fairly even.	Fairly even.
Neppiness	A little too neppy.	A little neppy (fine nepps).
Slubbiness .. .. .	....	A trifle slubby.

3. *Spinning Test Details and Results* :—See Table 5 on page 92.

II.—GRADER'S REPORT* FOR NANDYAL COTTON.

1930-31.										1931-32.									
Contract valued under										Broom July/Aug.									
Class ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Colour ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Staple Length ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Staple Strength ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Regularity ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Value above or below contract rate	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Basis ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Date of Valuation	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Remarks ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

* Report for 1934-35 is supplied by the mill supplying the sample.

Table 5.—SPINNING TEST RESULTS FOR NANDYAL COTTON.

Sample No.	Cotton.	Season	Date of Spinning.	Counts Monthly.	Weight of Sample, lbs.	WASTE PERCENTAGES.				RING FRAME PARTICULARS.*				YARN TEST RESULTS.						TYPES OF YARN.		RELATIVE HUMIDITY.						
						Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss.†	Yarn Breaks—spins per 100 spindles per hour.	Front Roller Spindle 2. 1. 2.	Spindle Speed 2. 1. 2.	Draft.	Turns per Inch.	BALISTIC.			TURNS PER INCH.			Spinning Bloom.	Spinning Bloom.	Spinning Bloom.	Spinning Bloom.				
															Lea.	Count-Strain, lb.	Count Actual.	Strand (lb).	Count Actual.	Work of Rings (Inch.-lbs.)					Count-Work Product.	Levellers Clvs.	Neaps per Yard.	Turns per Inch Actual.
1060	Nandyal	1930-31	4-6-31	24	10	10.5	9.2	0.6	9.1	18	180	9350	7.14	19.73	24.1	65.7	1383	24.5	110.8	2715	4	5.5	10.0	92	67	69		
1060	Nandyal	1930-31	4-6-31	29	..	..	..	..	..	72	130	9500	7.20	21.80	31.0	42.3	1311	31.0	93.4	2600	5	5.0	21.1	92	71	68
1060	Nandyal	1930-31	4-6-31	34	..	..	..	..	..	40	142	9000	7.81	23.20	32.0	42.7	1405	33.8	80.0	2704	3½	5.7	22.5	92	68	67
2751	Nandyal	1934-35	24-6-35	20	10	8.9	12.9	0.5	21.9	5	180	8800	5.38	17.38	19.0	70.3	1399	29.0	118.0	2372	4	2.5	10.9	84	80	74		
2751	Nandyal	1934-35	22-6-35	24A	..	..	..	..	..	27	156	8050	6.13	19.73	23.7	52.1	1235	23.8	100.0	2304	4	2.2	18.0	68	73	74
2751	Nandyal	1934-35	22-6-35	24B	..	..	..	..	..	50	186	10500	6.25	20.74	23.8	59.5	1302	23.8	101.8	2423	5	2.5	19.5	88	73	72

* Diameter of ring frame front rollers—7/8". Diameter of rings—11".

† It is to be noted that the total loss is for a small sample weighing 10 lbs.; for bulk sample spun under mill conditions, it would be less than shown here.

6.—NORTHERN CAMBODIA COTTON.

These samples have been tested by arrangement with the Bombay Millowners' Association, Bombay, who have very kindly agreed to arrange for the supply each season of samples of the first arrivals of the new crop.

Sample No.	Cotton.	Season.
1064	Northern Cambodia (Kurnool)	1930-31
2747	Northern Cambodia (Kurnool)	1934-35
3272	Northern Cambodia	1935-36

I.—SPINNING TESTS.

1. Treatment :—

- (a) *Blow-room*—1930-31 :—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).
 1934-35 and 1935-36 :—Hopper bale opener, Horizontal cleaner, Crighton, Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).
- (b) *Card-room*—1930-31 :—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.
 1934-35 and 1935-36 :—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band-drive arrangement.

2. Spinning Master's Report :—

(a) Cotton :—

	NORTHERN CAMBODIA.		
	1930-31.	1934-35.	1935-36.
Colour	Creamy-white to creamy.	Creamy-white.	White to creamy-white.
Cleanliness	Shows an occasional stain ; fairly clean.	Occasionally stained.	Fairly clean.
Feel	Full bodied.	Somewhat softish.	Smooth and softish.
Ginning and neppiness ..	Somewhat knotted and nepped.	Fairly well-ginned.	Fairly well-ginned.
Seeds	1% ginned and unginned seeds.	..	..
Card sliver	Clean.	Clean.	Clean and soft.
Card web	Fairly good.	Good.	A little neppy.
Weight of 10 flat strips ..	15.7 grams.	20.4 grams.	21.6 grams.
Remarks .. ..	..	..	..

(b) Yarn :—

	NORTHERN CAMBODIA.		
	1930-31.	1934-35.	1935-36.
Cleanliness	Fairly clean.	Almost clean.	Almost clean.
Evenness	Fairly even.	Fairly even.	Fairly even.
Neppiness	Somewhat neppy.	Fairly neppy.	Neppy.
Slubbiness .. ..	..	Somewhat slubby.	A little slubby.

3. Spinning Test Details and Results :—See Table 6 on page 95.

II.—GRADER'S REPORT* FOR NORTHERN CAMBODIA.

NORTHERN CAMBODIA.									
1930-31.				1934-35.				1935-36.	
Contract valued under	Broach.	July/Aug. Broach.	Broach July/Aug.		
Class	Fine.	Fine.	F. G. to Fine.		
Colour	Slight-cream.	Brownish white; somewhat stained.	Creamy-white.		
Staple Length	7/8 inch.	Full 7/8 inch.	31/32 inch.		
Staple Strength	Fair.	Very good.	Fair.		
Regularity	Poor.	Regular.	Fairly regular.		
Value above or below contract rate	Rs. 35 on.	Rs. 65 on.	Rs. 35 on.		
Basis	Rs. 175.	Rs. 232.	Rs. 220.		
Date of Valuation	30-5-31.	3-7-35.	1-7-36.		
Remarks

* Report for 1935-36 is made up by the mill supplying the sample.

Table 6--SPINNING TEST RESULTS FOR NORTHERN CAMBODIA.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
Sample No.	Cotton.	Season.	Date of Spinning.	Counts Normal.	Weight of Sample lbs.	WASTE PERCENTAGES.				RING FRAME PARTICULARS.*						YARN TEST RESULTS.						TEMPERATURE. (°F.)	RELATIVE HUMIDITY. (%)			
						Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss.†	Yarn Breakages per 100 spindles per hour.	Front Roller Speed R.P.M.	Spindle speed R.P.M.	Draft.	Turns per Inch.	lea.		BALLISTIC.		Evenness Class	Keps per yard.	Turns per Inch. Actual.			Spinning Room.	Testing Room.	
															Counts Actual.	Strength lb.	Count Strength Product.	Counts Actual.								Work of Rupture (inch-lb.)	Count Product.
1004	Northern Cambodia ..	1030-31	29-5-31	20	10	8.3	8.7	0.4	16.0	25	187	9,400	6.25	17.08	20.1	85.0	1325	20.1	112.4	2293	4	6.2	17.4	00	68	70
1004	Northern Cambodia ..	1030-31	29-5-31	24		..	..	..	..	20	174	9,375	6.25	19.73	23.1	57.0	1317	24.2	98.0	2372	5	4.0	18.0	00	68	70
2747	Northern Cambodia ..	1031-35	18-0-35	20	10	7.3	10.0	0.4	17.5	10	195	9,550	6.07	17.08	10.0	83.2	1050	10.8	130.2	2760	4	3.2	17.3	87	75	73
2747	Northern Cambodia ..	1031-35	19-0-35	21		..	..	..	..	18	181	9,800	5.55	19.73	23.7	65.0	1555	23.0	115.8	2793	4	4.2	10.1	89	70	70
2747	Northern Cambodia ..	1031-35	18-0-35	30		..	..	..	..	17	160	9,000	6.04	21.80	20.1	40.0	1450	20.5	80.0	2555	5	3.2	21.2	88	71	76
3272	Northern Cambodia ..	1035-30	13-7-30	20	10	7.8	11.5	0.3	18.7	10	103	9,700	0.10	17.08	20.3	82.3	1071	20.2	124.0	2517	4	4.0	17.1	80	73	72
3272	Northern Cambodia ..	1035-30	17-7-30	21		..	..	..	..	0	173	9,700	5.70	19.73	23.0	65.7	1531	23.8	103.1	2401	4	5.5	18.0	88	73	72
3272	Northern Cambodia ..	1035-30	17-7-30	30		..	..	..	..	13	150	9,700	7.11	21.80	30.3	17.2	1430	30.0	82.0	2552	5	5.0	20.0	88	77	75

* Diameter of ring frame front roller: 7/8". Diameter of rings: 1 5/8".

† It is to be noted that the total loss is for a small sample weighing 10 lbs.; for bulk sample spun under mill conditions it would be less than shown here.

7.—BENGALS COTTON.

These samples have been tested by arrangement with the Millowners' Association, Bombay, who have very kindly agreed to arrange for the supply each season of samples of the first arrivals of the new crop.

Sample				Sample			
No.	Cotton.	Place.	Season.	No.	Cotton.	Place.	Season.
912	Bengals.	Kasgunj	.. 1930-31	2667	Bengals.	Hansi	.. 1934-35
1602	„	Kosi	.. 1932-33	3030	„	Hansi	.. 1935-36
2106	„	Kosi..	.. 1933-34				

I.—SPINNING TESTS.

1. Treatment :—

- (a) *Blow-room.*—Upto 1934-35 inclusive ; Porcupine, Crighton (twice), Hopper feeder, Scutcher (3 times) ; 1930-31 Cotton was passed only once through the Crighton. 1935-36 ; Hopper Bale opener, Horizontal cleaner, Crighton, Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).
- (b) *Card-room.*—Upto 1933-34 inclusive ; Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1. 1934-35 and 1935-36 ; Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) Cotton :

	BENGALS.				
	1930-31.	1932-33.	1933-34.	1934-35.	1935-36.
Colour	White to creamy-white.	Creamy-white.	Creamy-white to creamy.	Creamy-white.	White to creamy-white.
Cleanliness	Fair ; stained ..	Leafy ; stained ..	Badly stained and leafy.	Badly stained ; leafy.	Leafy ; a little stained.
Feel	Dull ; rough ..	Roughish ..	Fairly good ..	Softish.	Rough.
Ginning and neppiness ..	Well-ginned (roller).	Somewhat knotted.	..	Fairly well-ginned.	Well-ginned.
Seeds .. ..	..	2.2% unginned	Contains a few seeds.	..	..
Card sliver .. ..	..	Almost clean ..	Clean ..	Fairly clean ..	Almost clean.
Card web .. ..	..	Good ..	Good ..	Fairly good after easing the tension.	Good.
Weight of 10 flat strips ..	..	22.5 grams	20.0 grams	26.3 grams	21.0 grams.
Remarks	Fully pressed ; a lot of fly in the Blow-room ..	Well-watered ; breakage excessive in 45A.	..	A poor sample ..	..

(b) Yarn :

	BENGALS.				
	1930-31.	1932-33.	1933-34.	1934-35.	1935-36.
Cleanliness	Clean ..	Clean ..	Little leafy ..	Fairly clean.	Clean.
Evenness	Very uneven ..	Fairly even ..	Fairly even in the lower count only.	Fairly uneven.	Uneven.
Neppiness	Free of nep ..	Almost nep-free ..	Free of nep ..	Free of nep.	Nep-free.
Slubbiness	Slubby ..	..	..	Slubby.	Somewhat slubby.

3. Spinning Test Details and Results :—See Table 7 on page 98.

II. GRADER'S REPORT* FOR BENGALS COTTON.

	BENGALS.				
	1930-31.	1932-33.	1933-34.	1934-35.	1935-36.
Contract valued under	Bengals.	Bengals.	Bengals.	Bengals.	Bengals.
Class	Fine	Fully good.	Fully good.	Fully good.	Fully good M. G.
Colour	White.	White.	Dull.	White.	Fairly white.
Staple Length	5/8 inch.	11/16 inch.	3/8 inch.	3/8 inch.	1/2 inch.
Staple Strength	Good.	Fair.	Rather poor.	Fair.	Good.
Regularity	Good.	Fair.	Good.	Fair.	Good.
Value above or below contract rate	Rs. 14 on.	Rs. 10 on.	Rs. 7 off.	Rs. 2 on.	Rs. 10 on.
Basis	Rs. 130	Rs. 168.	Rs. 143.	Rs. 151.	Rs. 148.
Date of Valuation	29-11-30	..	22-1-31.	8-2-35.	4-1-36.
Remarks .. ..	..	..	..	..	..

* Report since 1933-34 is made up by the mill supplying the sample.

Table 7.—SPINNING TEST RESULTS FOR BENGALS COTTON.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
Sample No.	Cotton	Season	Date of spinning	Counts Nominal	Weight of Sample. (lbs.)	WASTE PERCENTAGES				RING FRAME PARTICULARS				YANK TEST RESULTS								TEMPERATURE (°F.)		RELATIVE HUMIDITY. (%)		
						Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss. †	Yarn breaks per 100 spindles per hour.	Front roller Speed M. P. M.	Spindle Speed R. P. M.	Draft.	Turns per Inch.	LEA.		Counts Actual		Strength lbs.	Count—Strength Product.	BALISTIC.		Count—Work Product.		Twists per Inch Actual	Spinning Room.
912	Bengals	1930-31	24-11-30	6A	10	6.4	10.3	0.7	10.7	189	170	..	4.00	9.87	0.0	40.2	277	6.0	239.6	1538	0	1.7	9.4	82	87	84
912	Bengals	1930-31	25-11-30	8A		..	..	..	..	247	154	..	5.21	11.33	8.2	18.7	153	8.1	143.6	1163	7	1.5	10.7	83	87	89
1602	Bengals	1932-33	5-1-33	6A	10	13.8	15.2	0.6	27.3	123	175	4700	4.78	9.87	0.4	47.0	261	0.3	232.4	1590	4	1.0	9.4	79	70	74
1602	Bengals	1932-33	5-1-33	60		..	..	..	..	205	183	5000	4.73	11.03	6.0	101.0	654	0.3	209.0	1897	4	1.2	10.0	70	69	72
2106	Bengals	1933-34	29-1-34	6A	10	12.5	14.3	0.2	23.2	0	180	4800	4.50	9.57	5.9	94.8	550	5.9	346.0	2041	4	0.8	9.5	82	67	74
2106	Bengals	1933-34	29-1-34	6C		..	..	..	..	0	180	5600	4.50	11.03	5.9	147.4	870	6.0	335.2	2101	5	1.0	10.7	80	83	83
2106	Bengals	1933-34	29-1-34	8B		..	..	..	..	87	185	6100	6.25	12.63	8.3	73.2	694	8.4	292.4	1701	6	0.8	12.2	80	69	74
2667	Bengals	1934-35	20-2-35	6B	10	14.1	14.8	0.6	27.3	101	183	5300	5.00	10.44	6.2	42.7	263	6.3	265.0	1295	4	1.0	10.2	79	68	70
2667	Bengals	1934-35	20-2-35	6C		..	..	..	..	136	193	5000	5.00	11.05	6.4	50.2	360	6.2	246.4	1328	4	1.2	10.8	80	67	68
2667	Bengals	1934-35	20-2-35	8D		..	..	..	..	234	182	5350	5.00	12.63	8.2	35.1	293	8.2	176.0	1443	5	1.2	12.3	80	68	72
3000	Bengals	1935-36	13-1-36	6D	10	13.5	15.0	0.3	26.7	130	176	5300	5.10	10.44	6.4	33.1	244	6.2	208.0	1290	5	0.2	10.1	77	66	66
3000	Bengals	1935-36	13-1-36	6C		..	..	..	..	122	192	6000	5.10	11.08	6.2	60.8	377	6.1	200.2	1642	5	0.2	10.6	79	67	64
3000	Bengals	1935-36	13-1-36	8D		..	..	..	..	240	152	5300	5.00	12.63	8.1	34.8	292	8.4	160.4	1347	5	0.5	12.1	79	66	66

* Diameter of ring frame roller: 7/8". Diameter of spurs: 1 1/8".

† It is to be noted that the total loss is for a small sample weighing 10 lbs.; for bales sample spun under mill conditions it would be less than shown here.

8.—KHANDESH COTTON.

These samples have been tested by arrangement with the Millowners' Association, Bombay, who have very kindly agreed to arrange for the supply each season of samples of the first arrivals of the new crop.

Sample No.	Cotton.	Place.	Season.	Sample No.	Cotton.	Place.	Season.
965	Khandesh	Yawal	.. 1930-31	1250	Khandesh	Nimbora	.. 1931-32
1247	"	"	.. 1931-32	1603	"	Saudha	.. 1932-33
967	"	Ranala	.. 1930-31	2105	"	"	.. 1933-34
1249	"	"	.. 1931-32	2663	"	"	.. 1934-35
968	"	Nimbora	.. 1930-31	3031	"	"	.. 1935-36

I. SPINNING TESTS.

1. Treatment :—

- (a) *Blow-room*.—Upto 1934-35 inclusive; Porcupine, Crighton (twice), Hopper feeder, Scutcher (3 times). 1935-36; Hopper bale opener, Horizontal cleaner, Crighton, Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).
- (b) *Card-room*.—Upto 1933-34 inclusive; Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1. 1934-35 and 1935-36; Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) Cotton :—

KHANDESH.										
	1930-31. (Yawal).	1931-32. (Yawal)	1930-31. (Ranala).	1931-32. (Ranala).	1930-31. (Nimbora).	1931-32. (Nimbora).	1932-33. (Saudha).	1933-34. (Saudha).	1934-35. (Saudha).	1935-36. (Saudha).
Colour ..	White to creamy-white.	Creamy-white.	White to creamy-white; slightly bright.	Creamy-white.	White to creamy-white.	White to creamy-white.	Brightish-creamy-white.	White to creamy-white; bright.	Dullish-creamy-white.	White to creamy-white.
Cleanliness ..	Slightly stained; leafy.	Slightly stained; leafy.	Occasional stain.	Occasional stain; leafy.	Leafy ..	Somewhat stained; leafy.	Somewhat leafy.	Somewhat leafy.	Very slightly stained; leafy.	Leafy; a trifle stained.
Feel ..	Somewhat roughish.	Fairly good feel.	..	Slightly rough in feel.	Good ..	Softish ..	Good ..	Smooth and bodied.	Good ..	Roughish.
Ginning and neppiness.	Well-ginned.	Well-ginned.	Fairly well-ginned.	Well-ginned.	Fairly knotted.	Well-ginned.	Well-ginned.	Well-ginned.	Well-ginned.	Well-ginned.
Seeds ..	1% unginned seeds.	1.4% unginned seeds.	2.1% ginned and unginned.	1.8% unginned.	1.4% ginned.	1.4% ginned and unginned.	2.75% ginned and unginned.	A few seeds.	1.3% seeds ..	..
Card silver ..	Clean.	Clean ..	Clean ..	Clean ..	..	Clean ..	Clean ..	Clean ..	Clean ..	Clean.
Card web ..	Nep-free ..	Nep-free and even.	Good.	Free of nep.	..	Practically nep-free.	Good ..	Even and nep-free.	Good ..	Good.
Weight of flat strips.	1015.2 grams.	16.5 grams ..	15.3 grams ..	18.3 grams ..	..	18.5 grams ..	10.3 grams ..	15.4 grams ..	19.5 grams ..	16.6 grams.
Remarks ..	Fully pressed; staple weak for its length.	..	Fully pressed	..	Fully pressed	..	..	..	..	..

(b) Yarn :—

KHANDESH.										
	1930-31. (Yawal).	1931-32. (Yawal)	1930-31. (Ranala).	1931-32. (Ranala).	1930-31. (Nimbora).	1931-32. (Nimbora).	1932-33. (Saudha).	1933-34. (Saudha).	1934-35. (Saudha).	1935-36. (Saudha).
Cleanliness ..	Clean ..	Clean ..	Clean ..	Almost clean	Clean ..	Clean ..	Clean ..	Clean ..	Clean ..	Clean.
Evenness ..	Even ..	Even ..	Even in the lower counts only.	Even to fairly even.	Even in lower count.	Fairly even.	Fairly even.	Even ..	Fairly even.	Fairly even.
Neppiness ..	Free of nep.	Free of nep.	Free of nep.	Practically free of nep.	Nep-free ..	Almost free of nep.	Almost free of nep.	Free of nep.	Free of nep.	Nep-free.
Slubbiness ..	..	..	..	..	..	Occasional slub.	..	..	A little slubby	A little slubby

3. Spinning Test Details and Results :—See Table 8 on page 101.

II.—GRADER'S REPORT* FOR KHANDESH COTTON.

KHANDESH.										
	1930-31. (Yawal.)	1931-32. (Yawal.)	1930-31. (Ranala.)	1931-32. (Ranala.)	1930-31. (Nimbora.)	1931-32. (Nimbora.)	1932-33. (Sandha.)	1933-34. (Sandha.)	1934-35. (Sandha.)	1935-36. (Sandha.)
Contract valued under	Oomra.	Oomra.	Oomra.	Oomra.	Oomra.	Oomra.	Oomra.	Oomra.	Oomra.	Oomra.
Class	Fully good.	Fine.	Fully good.	Fine.	Fully good.	Fine.	Fully good to fine.	Fine.	Fine.	Fully good M.G.
Colour	White.	White.	White.	White.	White.	White.	White.	White.	White.	Fairly white.
Staple Length	5/8 inch.	3/4 inch.	13/16 inch.	13/16 inch.	13/16 inch.	27/32 inch.	3/4 inch.	3/4 inch.	1/2 inch.	11/16 inch.
Staple Strength	Fair.	Fair.	Fair.	Fair.	Fair.	Fair.	Fair.	Very good.	Good.	Good.
Regularity	Fair.	Good.	Fair.	Good.	Fair.	Good.	Fair.	Good.	Good.	Fairly good.
Value above or below contract rate ..	Rs. 5 off.	Rs. 15 on.	Rs. 5 on.	Rs. 17 on.	Rs. 5 on.	Rs. 18 on.	Rs. 8 on.	Rs. 1 on.	Rs. 2 on.	Rs. 5 on.
Basis	Rs. 165.	Rs. 212.	Rs. 165.	Rs. 212.	Rs. 165.	Rs. 212.	Rs. 188.	Rs. 179.	Rs. 226.	Rs. 201.
Date of Valuation	5-2-31.	10-2-32.	5-2-31.	10-2-32.	5-2-31.	10-2-32.	9-1-33.	22-1-34.	8-2-35.	4-1-36.
Remarks .. ..	..	..	..	..	..	..	..	..	..	..

* Report since 1933-34 is made up by the mill supplying the sample.

Table 8.—SPINNING TEST RESULTS FOR KHANDESH COTTON.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
Sample No.	Cotton.	Season.	Date of Spinning	Counts nominal.	Weight of Sample (lb.)	WASTE PERCENTAGES.				RINGS FRAME PARTICULARS.*						YARN TEST RESULTS.						LAPPER ATTACH. HUMIDITY (%).				
						Lap Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss.†	Yarn Breakages per 100 spindles per hour.	Kron's Roller Speed, R.P.M.	Spindle Speed, R.P.M.	Draft.	Turns per inch.	L.V.			Count Actual.	BALISTIN.		Kilograms Class.	Steps per yard.	Turns per inch.	Spinning Room.	Spinning Room.	Testing Room.
															Counts Actual.	Strength (lbs.)	Count Strength.		Work of Machine (lb. lb.)	Count-Work Product.						
005	Khandesh .. (Vernal)	1030-31	2-2-31	8	10	9.4	0.2	0.2	17.0	0	200	..	4.27	11.31	7.0	113.9	009	8.0	281.0	2253	3	1.2	11.0	80	71	09
005	Khandesh .. (Vernal)	1030-31	31-1-31	10A	..	..	..	..	..	10	184	..	5.42	12.63	10.0	72.0	720	10.2	204.8	2039	4	1.7	12.3	81	69	72
005	Khandesh .. (Vernal)	1030-31	2-2-31	10B	..	..	..	..	..	40	100	..	5.32	13.58	10.2	89.4	012	10.1	202.0	2340	5	2.0	13.2	80	70	67
1247	Khandesh .. (Vernal)	1031-32	2-2-32	8	10	10.5	11.3	0.4	20.0	44	504	6350	4.78	11.71	8.1	109.8	881	8.2	283.2	2324	3	1.0	10.9	80	70	63
1247	Khandesh .. (Vernal)	1031-32	1-2-32	10A	..	..	..	..	..	53	180	6380	5.21	12.63	10.0	77.1	771	10.0	221.2	2212	4	1.0	12.1	82	76	71
1247	Khandesh .. (Vernal)	1031-32	1-2-32	10B	..	..	..	..	..	45	188	6950	5.72	11.64	10.1	91.1	005	10.4	220.8	2206	4	1.0	13.0	82	70	60
007	Khandesh .. (Vernal)	1030-31	2-2-31	10	10	12.7	0.3	0.0	21.2	30	100	..	5.63	12.03	10.1	80.0	004	10.1	231.2	2370	4	1.2	12.2	80	73	07
007	Khandesh .. (Vernal)	1030-31	2-2-31	12	..	..	..	..	..	24	188	..	5.74	13.92	11.0	78.0	003	12.0	100.2	2314	5	1.5	13.4	83	07	63
007	Khandesh .. (Vernal)	1030-31	2-2-31	14	..	..	..	..	..	80	175	..	0.75	11.03	11.9	60.5	789	13.8	140.8	2920	6	1.5	14.8	82	68	07
1240	Khandesh .. (Vernal)	1031-32	2-2-32	12	10	11.3	10.8	0.5	21.3	20	183	7200	0.28	13.92	11.0	87.1	1030	12.1	185.0	2210	3	1.8	13.0	82	60	07
1249	Khandesh .. (Vernal)	1031-32	2-2-32	14A	..	..	..	..	..	18	176	7290	0.50	15.03	13.0	71.0	074	13.0	147.2	2016	4	2.0	14.7	83	63	05
1249	Khandesh .. (Vernal)	1031-32	2-2-32	14B	..	..	..	..	..	53	185	7800	0.51	15.07	13.0	78.0	1092	14.0	150.8	2239	4	1.8	15.4	82	60	60
008	Khandesh .. (Vernal)	1030-31	2-2-31	10	10	12.3	10.2	0.7	21.8	10	100	..	5.61	12.03	10.1	91.2	043	10.3	230.0	2107	4	1.2	12.1	80	73	00
008	Khandesh .. (Vernal)	1030-31	2-2-31	12A	..	..	..	..	..	48	188	..	5.71	13.92	11.0	89.1	1031	11.9	202.4	2109	5	1.7	13.4	83	07	09
008	Khandesh .. (Vernal)	1030-31	2-2-31	14A	..	..	..	..	..	03	170	..	0.77	11.03	14.1	57.1	895	14.2	170.8	1012	0	2.0	14.6	82	03	05
1260	Khandesh .. (Vernal)	1031-32	2-2-32	12A	10	10.2	10.3	0.0	10.3	65	187	7250	0.43	13.92	12.2	80.2	078	12.0	184.0	2110	4	0.8	13.5	81	60	71
1260	Khandesh .. (Vernal)	1031-32	2-2-32	14A	..	..	..	..	..	50	175	7300	0.39	15.03	13.8	80.0	011	13.8	174.4	2107	4	1.2	14.0	81	66	71
1269	Khandesh .. (Vernal)	1031-32	2-2-32	14B	..	..	..	..	..	30	183	7800	0.33	15.07	12.0	81.9	1114	13.8	108.0	2318	4	1.2	15.4	81	60	63
1003	Khandesh .. (Vernal)	1032-33	5-1-33	12A	10	11.3	10.5	0.0	21.0	104	189	7400	0.13	13.92	12.2	71.1	087	12.1	141.8	2230	4	1.2	13.0	80	70	74
1003	Khandesh .. (Vernal)	1032-33	5-1-33	14A	..	..	..	..	..	131	100	6250	0.10	14.93	13.0	61.0	850	14.8	157.2	2327	4	1.2	14.3	81	60	74
1003	Khandesh .. (Vernal)	1032-33	5-1-33	14B	..	..	..	..	..	51	180	7020	0.22	15.07	13.8	79.2	069	13.8	173.2	2300	4	1.2	15.0	80	60	72
2105	Khandesh .. (Vernal)	1032-34	27-1-34	12A	10	10.0	10.3	0.3	20.0	53	163	7500	0.25	14.02	12.0	78.3	012	12.0	104.8	2304	3	0.6	13.4	81	63	71
2105	Khandesh .. (Vernal)	1032-34	27-1-34	14A	..	..	..	..	..	87	163	7000	0.13	11.93	13.0	63.8	887	14.2	103.2	2317	4	0.5	14.5	81	67	72
2105	Khandesh .. (Vernal)	1032-34	27-1-34	14B	..	..	..	..	..	58	170	7350	0.17	15.07	14.0	75.9	1093	13.9	170.8	2371	4	0.8	15.4	81	67	70
2063	Khandesh .. (Vernal)	1034-35	16-2-35	12A	10	10.3	10.0	0.1	20.4	27	100	6800	0.22	12.01	10.1	70.3	809	10.2	135.2	2207	4	1.0	12.0	80	69	68
2063	Khandesh .. (Vernal)	1034-35	16-2-35	12A	..	..	..	..	..	30	160	6350	5.21	13.92	11.0	81.7	734	12.2	185.2	2259	5	0.8	13.2	79	67	63
2063	Khandesh .. (Vernal)	1034-35	16-2-35	12B	..	..	..	..	..	44	183	7350	5.21	14.93	12.1	71.3	809	12.2	187.0	2280	5	1.0	14.2	70	63	63
3031	Khandesh .. (Vernal)	1035-36	14-1-36	10	10	10.2	11.3	0.3	21.4	36	167	6800	5.40	11.64	10.1	72.1	763	10.1	204.0	2081	4	0.8	12.0	79	60	62
3031	Khandesh .. (Vernal)	1035-36	14-1-36	12A	..	..	..	..	..	20	170	6250	5.55	13.92	12.0	66.6	078	11.0	178.4	2123	4	0.5	13.5	79	67	65
3031	Khandesh .. (Vernal)	1035-36	14-1-36	12B	..	..	..	..	..	20	182	7300	5.69	14.93	12.3	61.0	780	12.3	183.2	2253	4	0.6	14.2	80	68	63

* Diameter of ring frame front roller: 7/8". Diameter of rings: 1 5/8".

† It is to be noted that the total loss is for a small sample weighing 10 lb.; for bulk sample spun under mill conditions it would be less than shown here.

9 (a).—UJJAIN (Ujjain) COTTON.

These samples have been tested by arrangement with the Millowners' Association, Bombay, who have very kindly agreed to arrange for the supply each season of samples of the first arrivals of the new crop.

Sample No.	Cotton.	Place.	Season.	Sample No.	Cotton.	Place.	Season.
969	Ujjain	Ujjain	.. 1930-31	2107	Ujjain	Ujjain	.. 1933-34
1251	"	"	.. 1931-32	2064	"	"	.. 1934-35
1670	"	"	.. 1932-33	3028	"	"	.. 1935-36

I.—SPINNING TESTS.

1. Treatment:—

- (a) *Blow-room*—Upto 1934-35 (inclusive); Poreupine, Crighton (twice), Hopper, Scutcher (3 times). 1935-36; Hopper bale opener, Horizontal cleaner, Crighton (once), gridded dust-trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).
- (b) *Card-room*—Upto 1933-34 (inclusive); Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1. 1934-35 and 1935-36; Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

2. Spinning Master's Report:—

(a) Cotton:—

	UJJAIN (UJJAIN).					
	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Colour ..	.. Creamy-white.	Creamy white; slightly bright.	White ..	White to creamy-white; brightish.	Creamy-white.	White.
Cleanliness ..	.. Fairly leafy	.. Occasional stain; fairly leafy.	.. Leafy ..	.. Occasional stain; somewhat leafy.	.. Occasionally stained; leafy	.. Leafy; a little stained.
Feel ..	.. Good ..	.. Good ..	.. Soft and fairly good.	.. Good smooth ..	.. Smooth ..	.. Good.
Ginning and neppiness.	A good deal knotted.	Fairly well-ginned.	Somewhat knotted and nopped.	Well-ginned ..	Well-ginned ..	Well-ginned.
Seeds ..	.. 1.9% unginned.	.. 2% ..	..	.. Contains a few unginned seeds.	.. Contains 1.3% seeds.	.. Contains 78 % full clean seeds.
Card sliver ..	..	.. Almost clean ..	.. Almost clean ..	.. Clean ..	.. Clean ..	.. Fairly clean.
Card web ..	..	.. Nop-free; a trifle cloudy.	.. Good ..	.. Even and nop-free.	.. Good ..	.. Web good.
Weight of 10 flat strips.	..	.. 10.8 grams	.. 17.7 grams	.. 18.5 grams	.. 20.0 grams	.. 17.1 grams.
Remarks ..	.. Staple irregular and weak.	..	.. Slightly watered.	..	..	..

(b) Yarn:—

	UJJAIN (UJJAIN).					
	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Cleanliness ..	.. Clean ..	.. Fairly clean ..	.. Almost clean ..	.. Clean ..	.. Almost clean ..	.. Clean.
Evenness ..	.. Fairly even in lower counts.	..	.. Even in two lower counts.	.. Even ..	.. Even ..	.. Even.
Noppiness ..	.. Fairly free of nop.	.. Somewhat nappy.	.. Practically free of nop.	.. Nop-free ..	.. Fairly free of nop.	.. Nop-free.
Slubbiness ..	.. A little slubby.	.. Slubby ..	.. A trifle slubby.	..	..	..
Remarks ..	..	..	..	..	..	..

3. Spinning Test Details and Results:—See table 9 (a) on page 104.

II.—GRADER'S REPORT* FOR UJAIN COTTON.

		UJAIN (UJAIN).					
		1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Contract valued under	.. ..	Broach.	Broach.	Broach.	Broach.	Broach.	Oomra.
Class ..	.. ..	Fully good.	Fully good to fine.	Fully good.	Fully good.	Fully good.	Fully good.
Colour ..	.. ..	White.	White.	Whitish.	White.	White.	Fairly white.
Staple Length	.. ..	7 inch.	4 1/2 inch.	4 1/2 inch.	4 inch.	4 inch.	3 1/2 inch.
Staple Strength	.. ..	Fair.	Fair.	..	Fair.	Good.	Good.
Regularity ..	.. ..	Fair.	Good.	Irregular.	Very fair.	Fair.	Good.
Value above or below contract rate	.. ..	Rs. 10 off.	Rs. 20 on.	Rs. 5 off.	Rs. 5 off.	Rs. 20 on.	Rs. 18 on.
Basis ..	.. ..	Rs. 200.	Rs. 230.	Broach F. G. April-May 1933.	Rs. 195.9%	Rs. 232.	Rs. 201.
Date of Valuation	.. ..	5-2-31.	10-2-32.	..	22-1-34.	8-2-35.	4-1-36.
Remarks ..	.. ..	..	..	Silky with fine fibres; leafy.	..	..	..

* Report since 1932-33 is made up by the mill supplying the sample.

Table 9 (a).—SPINNING TEST RESULTS FOR UJJAIN COTTON.

Sample No.	Cotton.	Season.	Date of Spinning.	Counts Nominal.	Weight of sample (lbs.)	WASTE PERCENTAGES.				RING FRAME PARTICULARS.*				YARN TEST RESULTS.						TEMPERATURE (°F.)	RELATIVE HUMIDITY (%)						
						Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss.†	Yarn Breakages per 100 spindles per hour.	Front Roller Speed, R.P.M.	Spindle Speed, R.P.M.	Draft.	Turns per inch.	I.R.A.			DILUSTIC.				Tensures Class.	Steps per yard.	Turns per inch Actual.			
															Counts Actual.	Strength (lbs.)	Count Strength	Counts Actual.	Work of Machine (inch-lb.)						Count-Work Product.		
009	Ujjain ..	1930-31	2-2-31	10	10	11.1	10.1	0.2	20.2	0	194	..	5.21	12.63	12.63	9.0	125.0	1237	10.0	247.2	2472	3	2.0	12.2	81	65	68
909	Ujjain ..	1930-31	2-2-31	12	..	..	..	..	..	8	180	..	5.43	13.92	13.92	12.1	90.7	1997	12.0	107.0	2371	4	2.5	13.6	81	67	90
909	Ujjain ..	1930-31	2-2-31	14	..	..	..	..	..	7	176	..	6.23	16.08	16.08	13.7	79.5	1989	13.0	154.4	2140	6	2.5	14.6	82	70	74
1251	Ujjain ..	1931-32	2-2-32	12	10	10.0	11.4	0.5	21.5	44	187	7250	0.22	13.02	13.02	12.1	87.1	1934	11.8	100.0	2312	4	2.0	13.3	82	09	71
1251	Ujjain ..	1931-32	4-2-32	14A	..	..	..	..	..	42	175	7300	6.23	15.09	15.09	13.5	80.1	1081	13.0	173.2	2350	5	1.2	14.5	81	60	70
1251	Ujjain ..	1931-32	4-2-32	14B	..	..	..	..	..	42	183	7800	0.41	15.07	15.07	13.4	91.3	1223	13.8	169.4	2338	5	2.2	15.3	81	60	70
1670	Ujjain ..	1932-33	22-2-33	12	10	11.9	0.0	0.4	20.9	7	190	7350	5.25	13.92	13.92	11.9	100.1	1101	12.2	203.2	2503	3	1.8	13.6	83	69	70
1670	Ujjain ..	1932-33	24-2-33	14	..	..	..	..	..	80	190	8300	8.23	15.97	15.97	14.3	84.3	1205	14.1	178.4	2315	4	1.2	15.6	82	07	72
2107	Ujjain ..	1933-34	30-1-34	10	10	11.1	10.8	0.2	20.8	0	202	7050	5.42	12.63	12.63	10.0	153.7	1537	10.1	250.4	2332	3	0.8	12.2	70	67	67
2107	Ujjain ..	1933-34	29-1-34	12A	..	..	..	..	..	0	197	7450	5.32	13.62	13.62	11.8	133.7	1578	12.0	239.4	2359	3	0.5	13.4	80	07	72
2107	Ujjain ..	1933-34	29-1-34	12B	..	..	..	..	..	7	200	8000	5.43	14.63	14.63	12.1	139.3	1649	12.0	243.2	2018	3	0.5	14.2	79	07	72
2107	Ujjain ..	1933-34	1-2-34	14	..	..	..	..	..	51	193	8200	6.34	15.97	15.97	14.3	109.3	1520	14.1	188.8	2062	4	0.5	15.4	82	61	68
2664	Ujjain ..	1934-35	18-2-35	12	0	10.4	11.1	0.3	20.5	0	200	7600	5.32	13.02	13.02	12.2	130.4	1409	12.0	237.2	2846	3	2.0	13.5	79	63	68
2664	Ujjain ..	1934-35	18-2-35	14A	..	..	..	..	..	7	182	7500	5.10	14.98	14.98	14.3	99.0	1424	11.1	202.0	2818	4	1.5	14.8	80	63	70
2694	Ujjain ..	1934-35	18-2-35	14B	..	..	..	..	..	0	192	8200	5.10	15.07	15.07	14.0	111.2	1357	14.1	293.6	2371	4	2.0	15.5	80	08	08
2694	Ujjain ..	1934-35	22-2-35	16	..	..	..	..	..	36	189	7000	5.95	15.97	15.97	16.4	99.0	1141	10.0	165.2	2742	5	1.8	15.5	80	70	71
3028	Ujjain ..	1935-30	10-1-36	12	10	11.0	11.4	0.2	21.8	0	193	7550	5.30	13.02	13.02	11.9	123.0	1404	12.2	226.8	2767	4	0.5	13.0	79	70	70
3028	Ujjain ..	1935-30	11-1-36	14A	..	..	..	..	..	15	180	8350	5.30	14.93	14.93	14.3	92.8	1327	14.2	100.4	2704	4	0.5	14.8	78	03	65
3028	Ujjain ..	1935-30	11-1-36	14B	..	..	..	..	..	29	186	8000	5.30	15.97	15.97	14.3	110.2	1579	14.0	202.4	2834	4	0.8	15.0	78	03	64

* Diameter of ring frame front roller 1". Diameter of rings 1½".

† It is to be noted that the total loss is for a small sample weighing 10 lbs. or thereabout; for bulk sample spun under mill conditions it would be less than shown here.

9 (b).—UJJAIN (Mandsaur) COTTON.

These samples have been tested by arrangement with the Bombay Millowners' Association, Bombay, who have very kindly agreed to arrange for the supply each season of samples of the first arrivals of the new crop.

Sample No.	Cotton.	Place.	Season.	Sample No.	Cotton.	Place.	Season.
966	Ujjain	Sujalpur	1930-31	2146	Ujjain	Mandsaur	1933-34
1248	"	"	1931-32	2666	"	"	1934-35
970	"	Mandsaur	1930-31	3064	"	"	1935-36
1601	"	"	1932-33				

I.—SPINNING TESTS.

1. Treatment :—

(a) *Blow-room* :—Up to 1934-35 inclusive :—Porcupine, Crighton (twice), Hopper, Scutcher (3 times). 1935-36 :—Hopper bale opener, Horizontal cleaner, Crighton, Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).

(b) *Card-room* :—Upto 1933-34 inclusive :—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1. 1934-35 and 1935-36 :—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) Cotton :—

	UJJAIN (SUJALPUR).		UJJAIN (MANDSAUR).				
	1930-31.	1931-32.	1930-31.	1932-33.	1933-34.	1934-35.	1935-36.
Colour ..	White to creamy-white.	Creamy-white.	Creamy-white.	White brightish.	White to creamy-white; brightish.	White.	White to creamy-white.
Cleanliness ..	Leafy; somewhat stained.	Fairly leafy; a good deal stained.	Leafy; stained.	Somewhat leafy.	Fairly clean.	Fairly leafy.	Somewhat leafy; A little stained.
Feel ..	..	Softish.	Goodish.	Roughish.	Good.	Good.	Roughish.
Ginning and neppiness.	Fairly well-ginned.	Fairly well-ginned.	Fairly well-ginned.	Good.	Well-ginned.	Well-ginned.	Well-ginned.
Seeds ..	1.6 % unginned.	1.25 % mainly unginned.	2 % unginned.	3 % unginned.	..	Contains 2.9 % seeds and kapas.	..
Card sliver ..	Comparatively clean	Almost clean.	..	Clean.	Clean.	Clean.	Fairly clean.
Card web ..	First class ..	Slightly nappy.	..	Fairly good; considerable fly shedding.	Good.	Good.	Good.
Weight of 10 flat strips.	17.2 grams ..	22.1 grams ..	..	20.1 grams ..	15.7 grams ..	19.6 grams ..	18.4 grams.
Remarks ..	Fully-pressed.	..	..	Excessive yarn breakage.	..	..	..

(b) Yarn :—

	UJJAIN (SUJALPUR).		UJJAIN (MANDSAUR).				
	1930-31.	1931-32.	1930-31.	1932-33.	1933-34.	1934-35.	1935-36.
Cleanliness ..	Clean.	Fairly clean.	Clean.	Clean.	Clean.	Almost clean.	Clean.
Evenness ..	Even.	Fairly even.	Fairly even.	Fairly even.	Even in two lower counts.	Fairly even.	Even.
Neppiness ..	Fairly free of nep.	A little nappy.	..	Almost nep-free.	Free of nep.	Practically nep-free.	Free of nep.
Slubbiness ..	..	..	..	..	..	..	A little slubby.
Remarks ..	..	..	A little leafy.	..	..	..	..

3. *Spinning Test Details and Results* :—See Table 9 (b) on page 107.

II.—GRADER'S REPORT* FOR UJJAIN COTTON.

		UJJAIN (SUGARER).		UJJAIN (LANDSAVER).				
		1930-31.	1931-32.	1930-31.	1932-33.	1933-34.	1934-35.	1935-36.
Contract valued under	.. ..	Bronch.	Bronch.	Bronch.	Oomra.	Oomra.	Bronch.	Oomra.
Class	.. ..	Fully good.	Fully good to fine.	Fully good.	Fine.	Fine.	Fully good.	Fully good.
Colour	.. ..	White.	White.	White.	White.	White.	White.	Dull White.
Staple Length	.. ..	$\frac{7}{8}$ inch.	$\frac{11}{16}$ inch.	$\frac{7}{8}$ inch.	$\frac{3}{4}$ inch.	$\frac{3}{4}$ inch.	$\frac{3}{4}$ inch.	$\frac{11}{16}$ inch.
Staple Strength	.. ..	Fair.	Fair.	Fair.	Fair.	Fair.	Good.	Fair.
Regularity	.. ..	Fair.	Good.	Fair.	Fair.	Fair.	Fair.	Irregular.
Value above or below contract rate	..	Rs. 10 off.	Rs. 20 on.	Rs. 10 off.	Rs. 10 on	Par.	Rs. 5 on.	Rs. 5 on.
Basis	.. ..	Rs. 200.	Rs. 220.	Rs. 200.	Rs. 188.	Rs. 183.	Rs. 232.	Rs. 182.
Date of Valuation	.. ..	5-2-31.	10-2-32.	5-2-31.	..	15-2-34.	8-2-35.	30-1-36.
Remarks	.. ..	..	..	..	..	..	..	..

* Report since 1932-33 is made up by the mill supplying the sample.

Table 9 (b)—SPINNING TEST RESULTS FOR UJAIN COTTON.

Sample No.	Cotton.	Season.	Date of Spinning.	Counts Nominal.	Weight of Sample (lbs.)	WASTE PERCENTAGES.				RING FRAME PARTICULARS*				YARN TEST RESULTS.						SAMPLE WYOMING (P.F.)	RELATIVE HUMIDITY (P.F.)				
						Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss.	Yarn Breakages per 100 spindles per hour.	Front Roller Speed, R.P.M.	Spindle Speed, R.P.M.	Twist.	L.A.		HALLISTIC.		Keweenaw Class.	Keps per yard.			Turns per inch.			
														Counts Actual.	Strength (lbs.)	Count Strength.	Counts Actual.						Weight (lb.)	Count-Work Product.	
906	Sajapur	1930-31	31-1-31	10	10	10.3	9.7	0.4	10.3	10	196	..	5.42	12.63	10.0	125.5	125.5	10.1	219.6	2521	3	1.2	12.3	81	64
900	"	1930-31	31-1-31	12	10	..	..	..	..	24	180	..	5.10	12.92	11.4	107.5	1247	11.7	265.2	2401	4	1.5	13.6	81	71
906	"	1930-31	31-1-31	14	10	..	..	..	..	46	174	..	6.67	15.66	13.8	77.3	1067	14.3	159.2	2277	5	2.6	14.9	80	63
1248	Sajapur	1931-32	2-2-32	12	10	11.6	12.2	0.6	21.9	65	143	2200	6.25	13.92	12.2	84.7	1072	12.1	194.8	2366	4	3.5	13.6	82	66
1248	"	1931-32	2-2-32	14A	10	..	..	..	..	24	175	2200	6.54	13.63	13.6	82.7	1125	13.9	159.6	2219	4	3.0	14.5	83	66
1248	"	1931-32	3-2-32	14B	10	..	..	..	..	26	181	2200	6.53	15.97	13.7	96.9	1136	14.1	167.2	2354	4	2.8	15.6	82	65
970	Mandaur	1930-31	3-2-31	10	10	13.1	9.0	6.5	28.1	110	194	..	5.10	12.63	10.1	113.6	1147	10.1	270.4	2327	4	2.5	12.3	81	63
970	"	1930-31	3-2-31	12	10	..	..	..	..	16	182	..	5.32	13.02	11.9	90.7	1070	11.8	190.4	2247	5	2.7	13.6	81	67
970	"	1930-31	3-2-31	14	10	..	..	..	..	33	176	..	6.11	15.08	14.0	53.4	414	14.2	149.6	2124	6	2.5	14.6	82	70
1601	Mandaur	1932-33	4-1-33	10	10	12.8	12.0	0.8	23.8	73	184	6700	5.31	12.61	10.0	71.1	711	10.0	194.8	1963	4	1.0	12.1	80	69
1601	"	1932-33	4-1-33	12A	10	..	..	..	..	102	176	6000	5.42	13.92	11.9	83.7	639	11.9	169.2	2013	5	1.0	13.4	82	67
1601	"	1932-33	5-1-33	12B	10	..	..	..	..	87	177	7150	5.32	14.63	12.1	62.0	720	12.3	160.4	2119	5	1.2	14.1	80	67
2140	Mandaur	1933-34	10-2-34	10	16	8.0	10.8	0.3	19.0	65	193	6300	5.21	12.63	10.3	94.1	970	10.0	271.6	2656	3	0.8	12.2	83	69
2140	"	1933-34	20-2-34	12	16	..	..	..	..	15	196	7200	5.53	13.92	11.9	81.2	906	12.1	205.2	2453	3	0.8	13.5	81	66
2140	"	1933-34	20-2-34	14	16	..	..	..	..	58	178	7700	6.10	15.97	14.2	71.7	1019	14.4	161.4	2367	5	1.0	15.5	81	70
2606	Mandaur	1934-35	10-2-35	10	10	12.7	16.3	0.3	21.9	0	202	7000	5.12	12.63	10.0	119.7	1107	9.9	256.8	2512	4	1.0	12.0	81	69
2606	"	1934-35	18-2-35	12	10	..	..	..	..	15	196	7450	5.31	13.92	12.5	86.0	1000	12.4	194.8	2465	5	1.2	13.5	79	69
2606	"	1934-35	18-2-35	14	10	..	..	..	..	51	186	8090	6.15	15.07	14.2	81.6	1169	14.1	171.0	2457	5	1.2	15.4	80	67
3004	Mandaur	1935-36	4-2-36	8A	10	0.4	13.4	0.3	21.7	33	186	5500	5.06	11.31	8.2	55.4	454	8.2	196.0	1007	3	0.8	11.2	81	72
3004	"	1935-36	4-2-36	8B	10	..	..	..	..	33	192	6300	5.20	12.67	8.1	84.7	686	8.2	249.8	2610	3	0.8	12.2	82	69
3004	"	1935-36	4-2-36	10	10	..	..	..	..	27	174	7100	5.44	14.22	10.2	72.5	736	10.0	293.0	2480	4	0.5	14.5	70	63

* Diameter of ring frame front roller: 3". Diameter of ring: 14".
 † Y. is to be noted that the total loss is for a small sample weighing 10 lbs.; for bulk sample spun under mill conditions it would be less than shown here.

10.—MOGLAI COTTON.

These samples have been tested by arrangement with the Millowners' Association, Bombay, who have very kindly agreed to arrange for the supply each season of samples of the first arrivals of the new crop.

Sample No.	Cotton.	Place.	Season.	Weight (lbs.)
1604	Moglai	Partur	1932-33	11
2145	"	Partur	1933-34	9
2665	"	Partur	1934-35	12
3029	"	Partur	1935-36	11

I.—SPINNING TESTS.

1. Treatment :—

(a) *Blow-room*.—Up to 1934-35 (inclusive) ; Porcupine, Crighton (twice), Hopper feeder, Scutcher (3 times). 1935-36 ; Hopper bale opener, Horizontal cleaner, Crighton (once), Gridded dust-trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).

(b) *Card-room*.—Upto 1933-34 (inclusive); Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1. 1934-35 and 1935-36 ; Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 3, which is fitted with tape drive arrangement for spindles while Ring Frame No. 1 possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) Cotton :—

	MOGLAI.			
	1932-33.	1933-34.	1934-35.	1935-36.
Colour	Creamy-white.	White to creamy-white.	Dullish white to creamy-white.	White to creamy-white; brightish.
Cleanliness	Leafy.	Leafy.	Leafy.	Leafy.
Feel	Good.	Good roughish.	Good.	Good.
Ginning and Neppiness ..	Good.	Well-ginned.	Well-ginned.	Fairly well-ginned.
Seeds	2% small size, ginned, partly ginned and unginned.	1.1% unginned.	..	..
Card sliver	Almost clean.	Good.	Clean.	Clean.
Card web	Good.	Good.	Good.	Even and nep-free.
Weight of 10 flat strips ..	17.9 grams.	15.9 grams.	20.4 grams.	13.7 grams.
Remarks	Spots of stain and unrigo fibres noticeable.	8 lb. sample.	..	..

(b) Yarn :—

	MOGLAI.			
	1932-33.	1933-34.	1934-35.	1935-36.
Cleanliness	Clean.	Clean.	Clean.	Fairly clean.
Evenness	Even.	Somewhat uneven.	Fairly even.	Even in the lower counts.
Neppiness	Practically nep-free.	Free of nep.	Almost free of nep.	Free of nep.
Slubbiness .. .. .	..	..	A little slubby.	A little slubby.
Remarks .. .. .	..	..	..	..

3. Spinning Test Details and Results.—See Table 10 on page 110.

II.—GRADER'S REPORT* FOR MOGLAI COTTON.

		MOGLAI.			
		1932-33.	1933-34.	1934-35.	1935-36.
Contract valued under	.. ..	Oomra.	Oomra.	Oomra.	Oomra.
Class ..	.. ..	Fine.	Fine.	Fine.	Fully good.
Colour ..	.. ..	White.	Dull white.	White.	Fairly white
Staple Length ..	.. ..	$\frac{3}{4}$ inch.	$\frac{3}{4}$ inch.	$\frac{1}{2}$ inch.	$\frac{1}{4}$ inch.
Staple Strength	.. ..	Fair.	Fair.	Fair.	F. Good.
Regularity ..	.. ..	Fair.	Fair.	Fair.	Good.
Value above or below contract rate	.. ..	Rs. 10 on	Rs. 10 off.	Rs. 5 on.	Rs. 3 on.
Basis ..	.. ..	Rs. 188.	Rs. 183.	Rs. 226.	Rs. 201.
Date of Valuation	.. ..	9-1-33.	15-2-34.	8-2-35.	4-1-36.
Remarks	.. ..	..	..	..	..

* Report since 1933-34 is made up by the mill supplying the sample.

TABLE 10.—SPINNING TEST RESULTS FOR MOGLAI COTTON.

Sample No.	Cotton.	Season.	Date of Spinning	Counts Nominal.	Weight of Sample, lbs.	WASTE PERCENTAGES.				RING FRAME PARTICULARS.*				YARN TEST RESULTS.								TEMPERATURE (°F.)		RELATIVE HUMIDITY (%)		
						Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss.†	Yarn Breakages per 100 spindles per hour.	Front Roller Speed ft. p. M.	Spindle Speed ft. p. M.	Draft.	Turns per inch.	LEA.			BALISTIC.			Evenness class.	Knots per yard.	Turns per inch. Actual.	Spinning Room.	Spinning Room.	Testing Room.
															Counts Actual.	Strength (lbs.)	Count-Strangth	Count-Work (inch-lbs.)	Count-Work Product.							
1604	Moghal	1932-33	6-1-33	10A	10	11.0	10.3	0.6	21.4	73	182	6250	5.32	12.63	10.0	92.7	927	280.4	2204	4	1.2	12.0	81	70	74	
1604	"	1932-33	6-1-33	12A		"	"	"	"	95	185	7100	5.33	13.92	11.6	78.7	913	184.8	2218	4	1.5	13.3	80	70	74	
1604	"	1932-33	6-1-33	12B		"	"	"	"	102	190	7500	5.43	14.68	11.6	92.2	1070	186.4	2208	4	1.2	14.3	80	70	72	
2145	Moghal	1933-34	19-2-34	10A	8	11.3	13.5	0.4	23.6	19	198	6800	5.21	12.03	10.0	80.4	804	231.6	2330	4	1.0	12.2	83	60	72	
2145	"	1933-34	20-2-34	12A		"	"	"	"	58	190	7200	5.53	13.92	11.0	67.5	803	188.0	2237	5	0.8	13.5	81	60	71	
2145	"	1933-34	20-2-34	12B		"	"	"	"	95	105	7700	5.53	14.68	12.0	84.4	1013	184.4	2231	5	1.5	14.2	81	68	72	
2665	Moghal	1934-35	19-2-35	10A	10	0.7	10.6	0.5	10.6	27	202	6950	5.24	12.63	10.3	77.4	797	230.4	2304	4	1.8	12.1	80	67	68	
2665	"	1934-35	19-2-35	12A		"	"	"	"	67	160	7000	5.33	13.92	12.4	61.0	644	175.2	2172	6	1.0	13.4	80	68	68	
2665	"	1934-35	19-2-35	12B		"	"	"	"	36	188	7500	5.33	14.68	12.4	68.4	848	184.4	2268	5	1.2	14.2	81	69	70	
3029	Moghal	1935-36	11-1-36	8	10	12.0	11.4	0.2	22.3	44	209	7000	5.00	11.31	8.2	105.4	864	280.4	2383	3	0.5	10.9	70	65	66	
3029	"	1935-36	13-1-36	10A		"	"	"	"	6	108	7000	5.10	12.63	10.0	87.0	879	234.4	2344	4	0.8	12.1	70	63	67	
3029	"	1935-36	17-1-36	10B		"	"	"	"	36	204	7500	5.10	13.58	10.2	100.3	1115	240.8	2408	4	0.5	13.0	70	61	61	
3029	"	1935-36	13-1-36	12B		"	"	"	"	36	163	7500	5.98	14.68	11.8	84.4	990	199.6	2335	5	0.5	14.0	77	64	66	

* Diameter of ring frame front roller— $\frac{1}{2}$ ". Diameter of ring— $\frac{1}{16}$ ".

† It is to be noted that the total loss is for a small sample weighing 10 lbs. or thereabout; for bulk sample spun under mill conditions it would be less than shown here.

11.—WESTERNS COTTON.

These samples have been tested by arrangements with the Millowners' Association, Bombay, who have very kindly agreed to arrange for the supply each season of samples of the first arrivals of the new crop.

Sample No.	Cotton.	Place.	Season.
2254	Westerns	Guntakal	1933-34.
2749	Westerns	Guntakal	1934-35.
3151	Westerns	Guntakal	1935-36.

I.—SPINNING TESTS.

1. Treatment :—

(a) *Blow-room*.—1933-34 :—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).

1934-35 and 1935-36 :—Hopper bale opener, Horizontal cleaner, Crighton (once), Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).

(b) *Card-room*.—1933-34 :—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.

1934-35 and 1935-36 :—As above, but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) Cotton :—

	WESTERNS.		
	1933-34.	1934-35.	1935-36.
Colour	White to creamy-white; bright.	White to creamy-white; brightish.	White to creamy-white; dullish.
Cleanliness	Leafy.	Leafy.	Leafy.
Feel	Good.	Good smooth.	Good.
Ginning and neppiness ..	Well-ginned.	A trifle knotted.	Well-ginned.
Seeds	1.7% partly-ginned.	....	....
Card Sliver	Clean.	Clean.	Almost clean.
Card Web	Even and nep-free.	Even and nep-free.	Good.
Weight of 10 flat strips ..	13.8 grams.	18.2 grams.	13.6 grams.
Remarks .. .. .	....	....	....

(b) Yarn :—

	WESTERNS.		
	1933-34.	1934-35.	1935-36.
Cleanliness	Almost clean.	Clean.	Almost clean.
Evenness	Fairly even.	Fairly even.	Fairly even.
Neppiness	Free of nep.	Almost free of nep.	Almost free of nep.
Slubbiness .. .. .	....	....	....

3. *Spinning Test Details and Results* :—See Table 11 on page 113.

II.—GRADER'S REPORT* FOR WESTERNS COTTON.

		WESTERNS.		
		1933-34.	1934-35.	1935-36.
Contract valued under	.. ..	Breach.	July/Aug. Breach.	Breach April/May.
Class ..	.. ..	Strict fine.	Fine.	Fine.
Colour ..	.. ..	White.	White.	Brownish white.
Staple Length ..	.. ..	31/32 inch.	Barely 13/16 inch.	29/32 inch.
Staple Strength	.. ..	Good.	Fair.	Fairly Good.
Regularity ..	.. ..	Good.	Very irregular.	Regular.
Value above or below contract rate	.. ..	Rs. 35 on Apr./May Breach.	Rs. 25 on.	Rs. 35 on.
Basis ..	.. ..	Rs. 183.	Rs. 232.	Rs. 203.
Date of Valuation	.. ..	1st May 1934.	3-7-35.	20-4-36.
Remarks	.. ..	....	....	....

* The reports for 1933-34 and 1935-36 are made by the mill supplying the sample.

Table 11.—SPINNING TEST RESULTS FOR WESTERNS COTTON.

Sample No.	Cotton.	Season.	Date of Spinning.	Counts Nominal.	Weight of Sample (lbs.)	WASTE PERCENTAGES.				RING FRAME PARTICULARS.*						YARN TEST RESULTS.										TEMPERATURE (°F.)	RELATIVE HUMIDITY (%)	
						Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss.†	Yarn Breakages per 100 spindles per hour.	Front Roller Speed R.P.M.	Spindle Speed R.P.M.	Draft.	Turns per inch.	L.F.A.			BALISTIC.			Maps per yard.	Turns per inch Actual.	Spiraling Room.	Testing Room.				
															Counts Actual.	Strength (lbs.)	Count-Strength Product.	Counts Actual.	Work of Machine (inches-lb.)	Count-Work Product.					Evenness Class.			
2254	Westerns	1933-34	30-4-34	20	10	12.0	8.0	0.4	10.4	5	100	9350	0.07	17.98	19.1	81.5	1079	19.6	128.0	2509	4	1.2	17.4	88	66	72		
2254	Westerns	1933-34	1-5-34	24		..	..	..	..	32	176	9300	3.07	19.73	24.1	62.8	1317	24.2	109.8	2476	1	1.5	19.3	88	70	71
2254	Westerns	1933-34	1-5-34	30		..	..	..	..	17	123	8720	0.04	23.11	29.3	47.5	1702	29.3	84.2	2167	5	1.2	22.3	88	60	70
2749	Westerns	1934-35	21-6-35	20	10	12.5	0.8	0.4	21.4	19	106	9650	5.83	17.98	19.6	85.9	1066	19.7	130.4	2569	4	2.0	17.4	87	74	79		
2749	Westerns	1934-35	20-6-35	24		..	..	..	..	14	179	9000	5.32	19.72	23.1	67.1	1550	23.6	167.2	2530	4	1.8	10.0	87	74	81
2749	Westerns	1934-35	20-6-35	30		..	..	..	..	30	151	9600	0.53	27.11	30.1	47.1	1416	29.4	87.2	2504	5	1.5	22.4	85	77	74
3151	Westerns	1935-36	23-4-36	20	10	9.1	7.9	0.4	10.0	31	193	9350	5.05	17.08	20.5	67.5	1384	20.0	157.8	2550	4	1.2	17.2	88	60	70		
3151	Westerns	1935-36	23-4-36	24		..	..	..	..	55	176	9550	5.07	19.73	21.5	52.5	1256	23.8	105.2	2501	1	1.2	19.0	90	69	60
3151	Westerns	1935-36	23-4-36	30		..	..	..	..	20	142	8600	0.04	23.26	29.4	45.0	1340	29.1	81.2	2421	5	1.0	22.0	89	63	72

* Diameter of ring frame front roller— $\frac{1}{2}$ ". Diameter of ring— $\frac{1}{16}$ ".

† It is to be noted that the total loss is for a small sample weighing 10 lbs.; for a bulk sample spun under mill conditions it would be less than shown here.

12.—MIRAJ COTTON.

These samples have been tested by arrangement with the Bombay Millowners' Association, Bombay, who have very kindly agreed to arrange for the supply each season of samples of the first arrivals of the new crop.

Sample No.	Cotton.	Place.	Season.
2532	Miraj.	Shedbal.	1933-34.
2750	Miraj.	Shedbal.	1934-35.
3270	Miraj.	Shedbal.	1935-36.

I.—SPINNING TESTS.

1. Treatment.

(a) *Blow-room*—1933-34 :—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).

1934-35 and 1935-36 :—Hopper bale opener, Horizontal cleaner, Crighton, Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).

(b) *Card-room*—1933-34 :—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.

1934-35 and 1935-36 :—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles while Ring Frame No. 1 possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) Cotton :—

	MIRAJ.		
	1933-34.	1934-35.	1935-36.
Colour	Creamy-white.	Creamy-white.	Creamy-white.
Cleanliness	Leafy.	Leafy.	Leafy.
Feel	Soft silky.	Poorish feel.	Good.
Ginning and neppiness ..	Well-ginned.	Somewhat knotted.	Somewhat knotted.
Seeds	$\frac{1}{2}\%$ partly-ginned.	..	..
Card sliver	Clean.	Almost clean.	Almost clean.
Card web	Even and nep-free.	Good.	Good.
Weight of 10 flat strips ..	15.5 grams.	16.3 grams.	15.0 grams.
Remarks .. .. .	..	..	..

(b) Yarn :—

	MIRAJ.		
	1933-34.	1934-35.	1935-36.
Cleanliness	Almost clean.	Almost clean.	Almost clean.
Evenness	Fairly even.	Even.	Even.
Neppiness	Free of nep.	Nep-free.	Practically free of nep.
Slubbiness .. .. .	..	..	A little slubby.

3. *Spinning Test Details and Results* :—See Table 12 on page 115.

13.—SURAT COTTON.

These samples have been tested by arrangement with the Millowners' Association, Bombay, who have very kindly agreed to arrange for the supply each season of samples of the first arrivals of the new crop.

Sample No.	Cotton.	Season.	Sample No.	Cotton.	Season.
1075	Surat	.. 1930-31	2752	Surat	.. 1934-35
1747	Surat	.. 1932-33	3142	Surat	.. 1935-36
2278	Surat	.. 1933-34			

I.—SPINNING TESTS.

1. Treatment :—

(a) *Blow-room* :—1930-31 :—Porcupine, Crighton (once only), Hopper, Scutcher (3 times).

1932-33 and 1933-34 :—As above but two passages in the Crighton. 1934-35 and 1935-36 :—Hopper bale opener, Horizontal cleaner, Crighton (once), Gridded dust trunks, Cage roller, Hopper feeder, Scutcher (3 times).

(b) *Card-room* :—Upto 1933-34 (inclusive) :—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.

1934-35 and 1935-36 :—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

2. Spinning Master's Report.

(a) Cotton :—

	SURAT.				
	1930-31.	1932-33.	1933-34.	1934-35.	1935-36.
Colour	White ; bright.	White to creamy-white.	White ; bright.	White ; bright.	White ; bright.
Cleanliness	Fairly clean.	Fairly clean.	A little leafy.	Fairly clean.	A little leafy.
Feel	Good-bodied.	Soft and bodied.	Good silky.	Good soft.	Smooth-bodied.
Ginning and Neppiness ..	Well-ginned.	Very well-ginned.	Well-ginned.	Well-ginned.	Well-ginned.
Seeds	1.25% unginned.	0.8%.	..	..	Contains a few unginned seeds.
Card Sliver	Clean.	Clean.	Almost clean.	Clean.	Clean.
Card Web	Good.	Even and nep-free.	Good.	Even and nep-free.	Even and nep-free.
Weight of 10 flat strips ..	6.7 grams ; very light.	12.8 grams.	15.6 grams.	15.0 grams.	11.7 grams.
Remarks	8-lb. sample.	..	..	..	..

(b) Yarn :—

	SURAT.				
	1930-31.	1932-33.	1933-34.	1934-35.	1935-36.
Cleanliness	Clean.	Clean.	Clean.	Clean.	Clean.
Evenness	Even.	Even.	Even.	Even.	Fairly-even.
Neppiness	Nep-free.	Free of nep.	Free of nep.	Practically nep-free.	Almost free of nep.
Slubbliness .. ..	..	..	..	..	..
Remarks .. ..	..	..	..	..	..

3. Spinning Test Details and Results.—See Table 13 on page 118.

II.—GRADER'S REPORT* FOR SURAT COTTON.

		SURAT.				
		1930-31.	1932-33.	1933-34.	1934-35.	1935-36.
Contract valued under	.. ..	Broach.	F. G. M. G. Branch Hedge Contract No. 2.	Broach July/Aug. 1934.	Broach July/Aug. 1935.	April/May Branch 1936.
Class .. ..	.. ..	.. Fine.	Superfine.	Superfine.	Superfine.	Fine to S. Fine.
Colour .. ..	.. ..	.. White.	Clean white.	White; bright.	White.	White to Creamy-white.
Staple Length .. ..	.. ..	.. One inch.	15/10" average.	31/32".	15/16".	Full 31/32".
Staple Strength .. ..	.. ..	.. Fair.	Good.	Good.	Very good.	..
Regularity .. ..	.. ..	.. Fair.	Even.	Very regular.	Regular.	Regular.
Value above or below contract rate ..	.. ..	.. Rs. 80 on.	Rs. 50 on.	Rs. 72 on.	Rs. 35 on.	Rs. 50 on.
Basis .. ..	.. ..	.. Rs. 160.	F. G. M. G. Branch Contract No. 2 April/May, Rs. 182.	Rs. 198.	Broach July/Aug. 1935.	Rs. 203.
Date of Valuation .. ..	.. ..	.. 10-6-31.	18-4-33.	30-5-31.	.. ..	20-4-36.
Remarks .. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..

* Report since 1932-33 is made by the Mill supplying the sample.

Table 13.—SPINNING TEST RESULTS FOR SURAT COTTON.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
Sample No.	Cotton.	Season.	Date of Spinning.	Counts Nominal.	Weight of Sample (lbs.)	WASTE PERCENTAGE.				RING FRAME PARTICULARS.*					YARN TEST RESULTS.										TEMPERATURE (°F.).	RELATIVE HUMIDITY(%)
						Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss.	Yarn Breakages per 100 spindles per hour.	Front Roller speed R.P.M.	Spindle speed R.P.M.	Draft.	Turns per inch.	ITAL.			EMMETTIC.			Spiraling Room.	Spiraling Room.	Testing Room.			
															Counts Actual.	Strength (lbs.)	Count-Strength Product.	Counts Actual.	Work of Rupture (inch-lb.)	Count-Work Product.				Evenness Class.			Neeps per yard.	Turns per inch Actual.
1075	Surat.	1930-31	10-6-31	24	8	8.2	6.6	0.7	14.8	20	132	9800	5.91	10.73	23.7	63.2	1408	24.5	103.2	2928	4	0.7	19.7	89	65	
1075	Surat.	1930-31	10-6-31	30	..	..	..	..	..	40	156	9950	7.43	23.11	30.1	46.3	1394	30.5	81.5	2405	5	0.5	22.0	83	00
1747	Surat.	1932-33	28-4-33	24	10	6.4	7.4	0.5	13.8	68	178	9000	5.55	19.73	23.0	63.5	1565	24.2	100.0	2505	3	1.2	10.3	00	00	
1747	Surat.	1932-33	2-5-33	30	..	..	..	..	..	80	169	10500	6.80	23.11	30.3	42.7	1394	20.7	82.4	2447	4	2.0	22.0	86	07
2273	Surat.	1933-34	10-5-34	20	10	5.8	8.5	0.3	14.0	5	100	9000	5.91	17.98	20.2	85.0	1735	19.8	135.8	2689	3	1.0	17.1	80	07	
2278	Surat.	1933-34	10-5-34	24	..	..	..	..	..	27	178	9350	5.42	19.73	23.8	69.3	1050	23.9	108.2	2586	4	1.2	18.8	80	85
2278	Surat.	1933-34	16-6-34	30	..	..	..	..	..	13	102	9550	6.58	21.30	20.5	51.4	1510	20.0	87.6	2540	5	1.2	20.9	00	67
2752	Surat.	1934-35	21-6-35	20	10	0.0	7.0	0.2	14.1	0	105	9350	6.05	17.93	20.5	88.7	1818	20.4	140.4	2994	3	1.0	17.3	85	70	
2752	Surat.	1934-35	25-6-35	24	..	..	..	..	..	18	170	9350	5.45	16.73	23.0	73.7	1739	23.2	124.0	2817	4	1.2	18.0	80	72
2752	Surat.	1934-35	25-6-35	30	..	..	..	..	..	17	100	9600	6.71	21.80	20.7	32.4	1650	20.5	94.4	2785	4	1.5	20.8	87	73
3142	Surat.	1935-36	17-4-36	20	10	4.4	7.0	0.3	11.3	0	102	9300	5.95	10.78	20.5	78.8	1615	20.3	127.8	2594	3	1.2	17.3	88	70	
3142	Surat.	1935-36	10-4-36	24	..	..	..	..	..	14	174	9500	5.39	10.73	22.9	73.6	1695	22.8	110.2	2640	4	0.8	18.9	88	68
3142	Surat.	1935-36	10-4-36	30	..	..	..	..	..	17	144	9550	6.76	21.80	30.1	47.2	1421	30.8	86.2	2655	5	1.5	20.8	87	04

* Diameter of ring frame front roller—7". Diameter of ring—14".

† It is to be noted that the total loss is for a small sample weighing 10 lbs. or thereabout; for bulk sample spun under XIII conditions it would be less than shown here.

14.—NAVSARI COTTON.

These samples have been tested by arrangement with the Bombay Millowners' Association, Bombay, who have very kindly agreed to arrange for the supply each season of samples of the first arrivals of the new crop.

Sample No.	Cotton.	Season.	Weight (lbs.)
1076	Navsari	1930-31	11
1778	„	1932-33	20
3141	„	1935-36	11

I. SPINNING TESTS.

1. Treatment :—

(a) *Blow-room*.—1930-31. Porcupine, Crighton (once only), Hopper Scutcher (3 times).

1932-33 :—As above but two passages in the Crighton.

1935-36 :—Hopper bale opener, Horizontal cleaner, Crighton (once), Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).

(b) *Card-room*.—Upto 1932-33. Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.

1935-36.—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) *Cotton* :—

—	Navsari.		
	1930-31.	1932-33.	1935-36.
Colour	White ; Bright.	White ; very bright.	White ; Bright.
Cleanliness	Fairly clean.	Fairly clean.	Clean.
Feel	Good-bodied.	Silky and bodied.	Good.
Ginning and Neppiness ..	Well-ginned.	Well-ginned.	Well-ginned.
Seeds	0.5% unginned.	....	....
Card Sliver	Clean ; Silky.	Clean and full.	Clean.
Card Web	Very good.	Even and nep-free.	Even and nep-free.
Weight of 10 flat strips ..	6.5 grams ; very light.	15.1 grams.	11.7 grams.
Remarks	8 lbs. sample.	....	....

(b) *Yarn* :—

—	Navsari.		
	1930-31.	1932-33.	1935-36.
Cleanliness	Clean.	Clean.	Clean.
Evenness	Even.	Fairly even.	Even in the lower counts.
Neppiness	Free of nep.	Free of nep.	Almost free of nep.
Slubbiness .. ..	....	....	....
Remarks .. ..	....	....	....

3. *Spinning Test Details and Results*.—See Table 14 on page 120.

II. GRADER'S REPORT FOR NAVSARI COTTON.

1930-31.										1932-33.*										1935-36.*									
Contract valued under										F.G.M.G. Broach Hedge Contract No. 2.										April/May Broach 1936.									
Class										Strict fine.										Fine to S. Fine.									
Colour										Clean white.										White to Creamywhite.									
Staple Length										1 1/4".										Full 1".									
Staple Strength										Fair.										.....								
Regularity										Fair.										Regular.									
Value above or below contract rate										Rs. 90 on.										Rs. 55 on.									
Basis										Rs. 160.										Rs. 203.									
Date of Valuation										10-6-31.										20-4-36.									
Remarks										....										....

* Reports for 1932-33 and 1935-36 are made by the mill supplying the sample.

Table 14.—SPINNING TEST RESULTS FOR NAVSARI COTTON.

Table 14.—SPINNING TEST RESULTS FOR NAVSARI COTTON																											
Sample No.	Cotton.	Season.	Date of Spinning.	Counts Nominal.	Weight of Sample (lbs.)	WASTE PERCENTAGES.				RING FRAME PARTICULARS.*					YARN TEST RESULTS.										TEMPERATURE (°F.)	RELATIVE HUMIDITY (%)	
						Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss. †	Yarn Breakages per 100 Spindles per hour.	Front Roller Speed R.P.M.	Spindle Speed R.P.M.	Draft.	Turns per Inch.	LEA.			BALANISTIC.			Evenness Class.	Keps per yard.	Turns per Inch. Actual.	Spinning Room.			Testing Room.
															Counts Actual.	Strength (lbs.)	Count-Strength Product.	Counts Actual.	Work of Rupture (inch-lb.)	Count-Work Product.							
1070	Navsari	1930-31	10-6-31	24	8	6.2	7.9	9.6	13.0	5	182	9800	5.81	19.73	23.1	69.9	1538	23.5	103.2	2425	92	60	67				
1070	"	1940-31	10-6-31	39	..	..	..	..	..	39	158	9959	7.50	23.11	30.5	44.9	1342	39.6	89.4	2460	92	68	68
1778	Navsari	1932-33	24-5-33	24	19	7.5	8.3	9.4	15.5	55	170	9700	5.32	10.73	22.7	66.2	1500	23.4	110.9	2388	89	90	70				
1778	"	1932-33	27-5-33	39	..	..	..	..	..	33	157	9700	6.34	23.11	30.0	45.3	1350	20.7	82.2	2441	90	97	68
3141	Navsari	1935-36	15-4-36	29	19	3.4	7.1	0.3	10.6	19	192	9330	5.85	17.98	19.9	87.8	1747	10.7	139.9	2001	90	97	71				
3141	"	1935-36	15-4-36	24	..	..	..	..	..	23	177	9450	5.03	19.73	23.8	90.9	1685	23.9	112.0	2043	88	89	73
3141	"	1935-36	15-4-36	39	..	..	..	..	..	10	144	8700	7.14	21.86	23.5	47.9	1413	30.0	89.2	2076	80	66	74

* Diameter of ring frame front roller—1 1/2". Diameter of rings—1 1/2".

† It is to be noted that the total loss is for a small sample weighing 10 lbs. or thereabout; for bulk sample spun under mill conditions it would be less than shown here.

15 (a).—TIRUPPUR CAMBODIA COTTON.

These samples have been tested by arrangement with the Bombay Millowners' Association, Bombay, who have very kindly agreed to arrange for the supply each season of samples of the first arrivals of the new crop.

Sample No.	Cotton.	Season.
1077	Tiruppur Cambodia	1930-31.
1748	Tiruppur Cambodia	1932-33.
2277	Tiruppur Cambodia	1933-34.
2753	Tiruppur Cambodia	1934-35.
3269	Tiruppur Cambodia	1935-36.

I.—SPINNING TESTS.

1. Treatment :—

(a) *Blow-room* : Upto 1933-34 :—Porcupine, Crighton (twice), Hopper, Sentcher (3 times). In 1930-31, it was passed only once thro' the Crighton.

1934-35 and 1935-36 : Hopper bale opener, Horizontal cleaner, Crighton, Gridded dust trunks, Cage exhaust, Hopper feeder, Sentcher (3 times).

(b) *Card-room* : Upto 1933-34 :—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.

1934-35 and 1935-36 : As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles while Ring Frame No. 1 possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) Cotton :—

	TIRUPPUR CAMBODIA.				
	1930-31.	1932-33.	1933-31.	1934-35.	1935-36.
Colour	Creamy-white to creamy.	Creamy-white ..	White to creamy-white.	White to creamy-white; bright.	White to creamy-white.
Cleanliness	Fairly clean; occasional stain.	Clean	Fairly clean; occasionally stained.	Clean	Fairly clean; slightly stained.
Feel	Good-bodied ..	Good soft ..	Good smooth ..	Good bodied ..	Softish.
Ginning and Neppiness ..	Well-ginned, but slightly neppy.	Well-ginned ..	Slightly knolled in ginning.	Fairly well-ginned.	A little knotted.
Seeds	Clean	Soft and clean ..	Almost clean ..	Clean and soft ..	Almost clean.
Card Oliver	A little neppy and cloudy.	A trifle both neppy and uneven.	Neppy	Somewhat neppy and uneven.	Somewhat neppy.
Card web					
Weight of 10 flat strips	19.0 grams.	25.8 grams.	26.5 grams	28.3 grams	20.1 grams.
Remarks			Well-watered ..		Well-watered at the time of pressing.

(b) Yarn :—

	TIRUPPUR CAMBODIA.				
	1930-31.	1932-33.	1933-34.	1934-35.	1935-36.
Cleanliness	Fairly clean ..	Almost clean ..	Almost clean ..	Clean	A little leafy.
Evenness	Even	Even	Even	Even	Even.
Neppiness	A little neppy ..	A little neppy ..	Somewhat neppy.	Neppy	Neppy.
Slubbiness			Somewhat slubby.		Fairly slubby.
Remarks					

3. Spinning Test Details and Results.—See Table 15 (a) on page 123.

II—GRADER'S REPORT* FOR TRUPPUR CAMBODIA COTTON.

122

TRUPPUR CAMBODIA.						
		1930-31.	1932-33.	1933-34.	1934-35.	1935-36.
Contract valued under	.. ..	Broach.	F. G. M. G. Broach Hedge Contract No. 2.	Broach July/Aug. 1934.	Broach July/Aug. 1935.	Broach.
Class	.. ..	Fine.	Fine.	White; bright.	Good.	Fully good to fine.
Colour	.. ..	Slightly cream.	Clean creamy-white.	Very clean.	White creamy.	Creamy.
Staple Length	.. ..	15/16".	31/32" average.	Full 31/32".	31/32".	Barely 31/32".
Staple Strength	.. ..	Fair.	Good.	Good.	Very good.	Good.
Regularity	.. ..	Fair.	Even.	Very even.	Regular.	Regular.
Value above or below contract rate	.. ..	Rs. 75 on.	Rs. 60 on.	Rs. 70 on.	Rs. 88 on.	Rs. 45 on.
Basis	.. ..	Rs. 100.	F. G. M. G. Broach Contract No. 2 April/May, Rs. 182.	Rs. 108.	Broach July/Aug. 1935.	Broach July/Aug. 1936.
Date of Valuation	.. ..	10-6-31.	18-4-33.	30-5-34.	..	15-7-36.
Remarks	.. ..	..	Silky.	..	..	..

* Report since 1932-33 is made by the mill supplying the sample.

Table 15 (a)—SPINNING TEST RESULTS FOR TRUPPUR CAMBODIA COTTON.

123

Sample No.	Cotton.	Season.	Date of Spinning.	WASTE PERCENTAGES.				RING FRAME PARTICULARS.*				YARN TEST RESULTS.										TEMPERATURE (°F.).		RELATIVE HUMIDITY (%).	
				Counts Nominal.	Weight of Sample (lbs.).	Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss.†	Yarn Breakages per 100 spindles per hour.	Front Roller Speed R.P.M.	Spindle Speed R.P.M.	Draft.	Turns per Inch.	LEA.			BULLISTIC.			Neps per yard.	Turns per Inch actual.	Spiraling Room.		Spiraling Room.
															Counts Actual.	Strength (lbs.)	Count-Strength Product.	Counts Actual.	Work of Rupture (Inch-lb.).	Count-Work Product.						Revolutions Class.
1077	Cambodia	1930-31	11-6-31	24	8	9.0	19.5	0.9	16.4	5	181	9760	0.18	19.73	25.2	59.5	1424	24.9	98.2	2416	4	3.2	18.9	92	69
1077	Cambodia	1930-31	11-6-31	30						19	154	9800	7.65	23.11	29.9	47.6	1400	39.3	84.8	2599	5	3.2	22.3	91	68
1746	Cambodia	1932-33	28-4-33	24	10	5.3	12.9	0.5	17.1	45	178	9600	5.60	19.73	23.9	59.5	1422	23.6	105.8	2518	3	2.0	19.0	87	83
1749	Cambodia	1932-33	2-5-33	30						70	103	10500	7.06	23.11	30.1	43.1	1597	39.4	70.0	2492	4	3.5	22.0	89	69
2277	Cambodia	1933-34	16-5-34	29	10	5.3	13.2	0.3	13.1	19	169	9600	6.19	17.98	20.0	82.2	1614	29.0	132.0	2910	3	3.8	17.2	89	67
2277	Cambodia	1933-34	16-5-34	24						9	178	9350	9.22	19.73	23.0	67.0	1691	24.4	103.8	2533	4	4.0	16.9	90	70
2277	Cambodia	1933-34	16-5-34	30						13	162	9350	7.08	21.86	30.7	45.9	1499	30.3	82.2	2491	5	3.2	21.2	90	69
2753	Cambodia	1934-35	24-6-35	29	10	9.2	14.2	0.4	19.8	5	194	9500	9.19	17.98	19.7	69.2	1665	19.8	137.8	2728	3	5.0	17.1	88	69
2753	Cambodia	1934-35	26-6-35	24						27	189	9650	5.33	19.73	23.7	72.8	1725	23.7	119.0	2749	4	5.8	10.1	87	74
2753	Cambodia	1934-35	26-6-35	30						23	191	9650	9.71	21.89	29.2	55.4	1618	29.7	90.6	2691	4	0.9	21.0	87	74
3259	Cambodia	1935-36	11-7-36	29	10	7.0	19.3	0.3	16.9	21	189	9360	9.22	17.98	19.0	89.5	1781	19.8	127.8	2530	3	4.8	17.2	87	72
3259	Cambodia	1935-36	15-7-36	24						9	174	9359	5.67	19.73	23.7	69.0	1650	23.0	105.0	2510	4	4.2	10.1	88	73
3259	Cambodia	1935-36	15-7-36	30						17	156	9559	7.03	21.89	39.0	51.1	1633	29.7	84.5	2513	5	5.0	21.1	87	73

* Diameter of ring frame front roller—7". Diameter of rings—1.4".

† It is to be noted that the total loss is for a small sample weighing 10 lbs., or thereabout; for bulk sample spun under mill conditions it would be less than shown here.

15 (b).—TIRUPPUR CAMBODIA COTTON.

These samples have been tested by arrangement with the Bombay Millowners' Association, Bombay, who have very kindly agreed to arrange for the supply each season of samples of the first arrivals of the new crop.

Sample No.	Cotton.	Place.	Season.
2373	Cambodia	Tiruppur	1933-34
2745	Cambodia	Tiruppur	1934-35
3149	Cambodia	Tiruppur	1935-36

I. SPINNING TESTS.

1. Treatment :—

(a) *Blow-room.*—1933-34 :—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).

1934-35 and 1935-36 :—Hopper bale opener, Horizontal cleaner, Crighton (once), Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).

(b) *Card-room.*—1933-34 :—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.

1934-35 and 1935-36 :—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) *Cotton* :—

	TIRUPPUR CAMBODIA.		
	1933-34.	1934-35.	1935-36.
Colour	Creamy-white ; bright.	White to creamy-white ; brightish.	White to creamy-white ; brightish.
Cleanliness	Clean ; somewhat stained.	Clean with occasional stains.	Clean.
Feel	Good smooth.	Good smooth.	Good smooth.
Ginning and neppiness ..	Slightly knotted.	Fairly well-ginned.	Fairly well-ginned.
Seeds .. ..	..	..	..
Card Sliver	Clean and soft.	Clean.	Clean.
Card Web	Cloudy and neppy.	Slightly neppy and uneven.	Slightly neppy.
Weight of 10 flat strips ..	24.7 grams.	20.7 grams.	20.3 grams.
Remarks .. ..	..	..	..

(b) *Yarn* :—

	TIRUPPUR CAMBODIA.		
	1933-34.	1934-35.	1935-36.
Cleanliness	Almost clean.	Almost clean.	A little leafy.
Evenness	Even in the two lower counts.	Fairly even.	Fairly even.
Neppiness	Neppy.	Neppy.	Neppy.
Slubbiness	Slubby.	A little slubby.	..

3. *Spinning Test Details and Results* :—See Table 15 (b) on page 125.

II. GRADER'S REPORT* FOR TIRUPPUR CAMBODIA.

TIRUPPUR CAMBODIA.											
1933-34.*				1934-35.				1935-36.*			
Contract value per pound
Class
Colour
Staple Length
Staple Strength
Regularity
Value above or below contract rate
Basis
Date of Valuation
Remarks

* The reports for 1933-34 and 1935-36 are compiled by the mill supplying the sample.

Table 15 (b).—SPINNING TEST RESULTS FOR TIRUPPUR CAMBODIA.

Sample No.	Cotton.	Season.	Date of Spinning	Counts Nominal.	Weight of Sample (lbs.)	WASTE PERCENTAGES.				RING FRAME PARTICULARS.*						YARN TEST RESULTS. BALISTIC.						Splining Room.	Relative Humidity. (%)		
						Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss †	Yarn Breakage per 100 spindles per hour.	Front Roller Speed R.P.M.	Spindle Speed R.P.M.	Draft.	Turns per Inch.	Counts Actual.	Strength (lbs.)	Count-Strength Product.	Counts Actual.	Work of Rupture (inch-lb.)	Count-Work Product.	Breakage Class.			Neps per yard.	Turns per Inch Actual.
2273	Tiruppur Cambodia.	1933-34	9-7-34	20.	10	0.6	12.5	0.2	13.4	5	200	9800	0.25	17.58	19.6	85.0	1078	20.0	123.8	2476	3	3.8	17.0	70	75
2274	Tiruppur Cambodia.	1933-34	10-7-34	24	10	..	..	..	..	4	170	9600	5.54	19.73	24.3	66.3	1011	24.9	101.0	2330	4	3.2	18.7	74	70
2275	Tiruppur Cambodia.	1933-34	10-7-34	30	10	..	..	..	..	30	100	9000	0.70	21.80	50.3	49.0	1453	30.1	80.0	2420	5	3.5	20.8	77	78
2745	Tiruppur Cambodia.	1934-35	13-6-35	20	10	0.7	14.0	0.4	20.0	20	108	9300	6.10	17.08	21.2	80.3	1702	21.3	122.2	2003	4	4.2	17.3	98	82
2746	Tiruppur Cambodia.	1934-35	15-6-35	24	10	..	..	..	..	11	182	9600	5.35	10.73	24.1	70.2	1002	23.0	113.2	2705	4	5.0	10.0	80	80
2747	Tiruppur Cambodia.	1934-35	15-6-35	30	10	..	..	..	..	13	160	9300	0.94	21.80	50.0	52.7	1500	30.0	90.8	2724	5	5.2	21.2	98	80
2748	Tiruppur Cambodia.	1934-35	17-6-35	20	10	14.6	9.7	0.3	14.1	10	194	9300	0.97	17.98	20.2	89.0	1708	10.8	147.0	2922	3	4.2	17.4	80	72
2749	Tiruppur Cambodia.	1934-35	20-6-35	24	10	..	..	..	..	18	174	9250	5.55	10.73	24.7	68.4	1689	24.8	113.0	2802	4	4.5	19.1	89	72
2750	Tiruppur Cambodia.	1934-35	21-6-35	30	10	..	..	..	..	7	162	9000	0.80	21.80	50.3	52.2	1350	30.0	93.4	2703	5	4.5	21.5	88	72

* The reports for 1933-34 and 1935-36 are compiled by the mill supplying the sample.

16.—HUBLI KUMPTA COTTON.

These samples have been tested by arrangement with the Bombay Millowners' Association, Bombay, who have very kindly agreed to arrange for the supply each season of samples of the first arrivals of the new crop.

Sample No.	Cotton.	Season.	Weight (lbs.)	Sample No.	Cotton.	Season.	Weight (lbs.)
1020	Hubli Kumpta	1930-31	12	2229	Hubli Kumpta	1933-34	11
1332	"	1931-32	12	2692	"	1934-35	11
1742	"	1932-33	12	3160	"	1935-36	11

I. SPINNING TESTS.

1. Treatment :—

(a) *Blow-room*.—Upto 1934-35 :—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).

1935-36 :—Hopper bale opener, Horizontal cleaner, Crighton (once), Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).

(b) *Card-room*.—Upto 1933-34 :—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.

1934-35 and 1935-36 :—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) *Cotton* :—

HUBLI KUMPTA.						
	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Colour	Creamy-white.	Dullish creamy-white.	White to creamy-white.	Dullish-White to creamy-white.	White to creamy-white.	White to creamy-white.
Cleanliness	Slightly stained, leafy.	..	Dull; leafy.	Leafy (fine leaf).	Leafy.	Leafy.
Feel	Good.	..	Good.	Good.	Good.	Good.
Ginning and Neppiness. Seeds	Well-ginned.	Somewhat knotted. 0.3% ginned and unginned besides undeveloped seeds.	Fairly well-ginned.	Well-ginned.	Well-ginned.	Fairly well-ginned.
Card Sliver	Fairly clean.	A little leafy.	Almost clean.	Clean.	Clean.	Almost clean.
Card Web	Good.	Good.	Good.	Even; neppy.	Good.	Good.
Weight of 10 flat strips. Remarks	10.7 grams. Fully pressed.	14.7 grams.	13.9 grams.	14.7 grams.	13.1 grams.	11.6 grams.

(b) *Yarn* :—

HUBLI KUMPTA.						
	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Cleanliness	Clean.	Almost clean.	Clean.	Almost clean.	Clean.	Clean.
Evenness	Even.	Even.	Fairly even.	Even.	Fairly even.	Even.
Neppiness	Practically nep-free.	Nep-free.	Free of nep.	Practically nep-free.	Almost free of nep.	Almost free of nep.
Slubbiness .. ..	..	..	..	..	..	..
Remarks .. ..	..	..	..	..	..	..

Spinning Test Details and Results.—See Table 16 on page 128.

II. GRADER'S REPORT* FOR HUBLI KUMPTA COTTON.

		HUBLI KUMPTA.					
		1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Contract valued under	.. ..	Kumpta.	Broach Kumpta.	F. G. M. G. Broach.	F. G. M. G. Broach.	F. G. M. G. Broach.	F. G. M. G. Broach
Class	.. ..	Fully good.	Fully good.	Fully good.	Fully good.	Strict fully good.	Fully good.
Colour	.. ..	Slight tinge.	Slight orcam.	Brownish-white.	Brownish-white.	Rich Brownish white.	Whitish brown.
Staple Length	.. ..	16/16".	20/32".	7/8".	7/8"	20/32".	3".
" Strength	.. ..	Fair.	Fair.	Fair.	Fair.	Good.	Poor.
Regularity	.. ..	Fair.	Fair.	Regular.	Regular.	Regular.	Irregular.
Value above or below contract rate	.. ..	Pass.	Rs. 30 on.	Rs. 22 on.	Rs. 30 on.	Rs. 60 to Rs. 65 above.	Rs. 30 above.
Basis	.. ..	Rs. 250.	Rs. 106.	Rs. 177.	Rs. 105.	Rs. 215.	Rs. 200.
Date of Valuation	.. ..	15-4-31.	16-5-32.	13-4-33.	9-4-34.	6-3-35.	20-4-36.
Remarks	.. ..	..	..	..	..	..	..

* Report since 1933-34 is made by the Mill supplying the sample.

Table 16.—SPINNING TEST RESULTS FOR HUBLI KUMPTA COTTON.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27																																																																																																																																																																																																																																																																																																																																																																							
Sample No.	Cotton.	Season.	Date of Spinning.	Counts Nominal.	Weight of Sample (lbs.)	WASTE PERCENTAGES.				RING FRAME PARTICULARS.*						YARN TEST RESULTS.						TEMPERATURE. (°F.).	RELATIVE HUMIDITY. (%)																																																																																																																																																																																																																																																																																																																																																																										
						Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss.†	Yarn Breakages per 100 spindles	Front Roller Speed, R.P.M.	Spindle Speed, R.P.M.	Draft.	Turns per Inch.	Counts Actual.	Strength (lbs.).	Count-Strength Product.	Counts Actual.	Work of Rupture (inch-lb.).	Count-Work Product.	Evenness Class.			Neps per yard.	Turns per Inch Actual.	Spinning Room.	Testing Room.																																																																																																																																																																																																																																																																																																																																																																						
																												Count-Work Product.	Count-Work Product.	Count-Work Product.	Count-Work Product.	Count-Work Product.	Count-Work Product.	Count-Work Product.	Count-Work Product.	Count-Work Product.	Count-Work Product.	Count-Work Product.	Count-Work Product.	Count-Work Product.	Count-Work Product.	Count-Work Product.	Count-Work Product.	Count-Work Product.	Count-Work Product.	Count-Work Product.	Count-Work Product.	Count-Work Product.	Count-Work Product.	Count-Work Product.	Count-Work Product.	Count-Work Product.	Count-Work Product.	Count-Work Product.	Count-Work Product.	Count-Work Product.	Count-Work Product.	Count-Work Product.	Count-Work Product.	Count-Work Product.	Count-Work Product.	Count-Work Product.	Count-Work Product.	Count-Work Product.	Count-Work Product.	Count-Work Product.	Count-Work Product.	Count-Work Product.	Count-Work Product.	Count-Work Product.	Count-Work Product.	Count-Work Product.	Count-Work Product.	Count-Work Product.	Count-Work Product.	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Count-Work Product.	Count-Work Product.	Count-Work Product.	Count-Work Product.	Count-Work Product.	Count-Work Product.	Count-Work Product.	Count-Work Product.	Count-Work Product.	Count-Work Product.

* Diameter of ring frame front roller: 1". Diameter of rings: 1½".

† It is to be noted that the total loss is for a small sample weighing 10 lbs.; for bulk sample spun under mill conditions it would be less than shown here.

17.—HUBLI UPLAND COTTON.

These samples have been tested by arrangement with the Millowners' Association, Bombay, who have very kindly agreed to arrange for the supply each season of samples of the first arrivals of the new crop.

Sample No.	Cotton.	Season.	Weight (lbs.)	Sample No.	Cotton.	Season.	Weight (lbs.)
1021	Hubli Upland	1930-31	12	2230	Hubli Upland	1933-34	11
1333	"	1931-32	12	2763	"	1934-35	11
1743	"	1932-33	12	3161	"	1935-36	11

I. SPINNING TESTS.

1. Treatment :—

(a) *Blow-room.*—Upto 1933-34 (inclusive):—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).

1934-35 and 1935-36:—Hopper bale opener, Horizontal cleaner, Crighton (once), Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times).

(b) *Card-room.*—1933-34 (inclusive):—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1.

1934-35 and 1935-36:—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive-arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) Cotton :—

HUBLI UPLAND.						
	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Colour	Creamy-white; slightly bright.	Creamy-white.	White to creamy-white; fairly bright.	Creamy-white.	White to creamy-white.	Creamy-white.
Cleanliness ..	A little leafy.	Fairly leafy.	A little leafy.	A little leafy.	A little leafy.	Leafy.
Feel	Good softish.	Softish.	Good.	Poorish soft.	Good.	Softish.
Ginning and Neppiness	Knotted due to ginning.	A good deal knotted.	Napped and knotted.	Well-ginned.	Somewhat knotted.	Somewhat knotted in ginning.
Seeds .. ..	..	A few undeveloped besides 0.9% partly ginned and clean seeds.	..	..	..	..
Card Sliver ..	Clean.	Fairly clean.	Almost clean.	Clean.	Clean.	Almost clean.
Card Web ..	A trifle neppy and cloudy.	Good.	A little neppy.	Cloudy.	Somewhat neppy.	Somewhat neppy.
Weight of 10 flat strips	18.3 grams.	18.5 grams.	20.9 grams.	19.0 grams.	31.3 grams.	15.8 grams.
Remarks ..	Fully pressed.	..	..	..	..	..

(b) Yarn :—

HUBLI UPLAND.						
	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Cleanliness ..	Fairly clean.	Fairly clean.	Clean.	Clean.	A little leafy.	Almost clean.
Evenness ..	Even.	Fairly even.	Fairly even.	Fairly even.	Fairly even.	Fairly even.
Neppiness ..	Almost nep-free	Almost nep-free	Almost free of nep.	Almost free of nep.	Neppey.	Almost free of nep.
Slubbiness ..	..	..	A trifle slubby.	..	..	..
Remarks ..	..	..	..	..	..	..

3. *Spinning Test Details and Results.*—See Table 17 on page 131.

II. GRADER'S REPORT* FOR HUBLI UPLAND COTTON.

		HUBLI UPLAND.					
		1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Contract valued under	..	Kumta.	Broach Kumta.	F. G. M. G. Broach.	F. G. M. G. Broach.	F. G. M. G. Broach July/	F. G. M. G. Broach.
Class	..	Fully good.	Better fully good.	Fine.	Fine.	Aug. delivery.	Fully good to fine.
Colour	..	Slight tinge.	White.	White.	Dull white.	Pure white.	Dull white.
Staple Length	..	7/8"	7/8"	13/16"	3/4"	27/32" to 28/32"	Barely 3/4"
" Strength	..	Fair.	Poor.	Weak.	Weak.	Fairly strong.	Weak.
Regularity	..	Fair.	Fair.	Rather irregular.	Rather irregular.	Fairly regular.	Fairly regular.
Value above or below contract rate	..	Rs. 10 off.	Rs. 25 on.	Rs. 7 on.	Rs. 20 on.	Rs. 60 on.	Far to Rs. 5 on.
Basis	..	Rs. 250.	Rs. 165.	Rs. 177.	Rs. 195.	Rs. 229.	Rs. 200.
Date of Valuation	..	15-4-31.	10-5-32.	18-4-33.	9-4-34.	20-4-35.	20-4-36.
Remarks	..	..	..	..	..	..	..

* Report since 1933-34 is made by the Mill supplying the sample.

Table 17.—SPINNING TEST RESULTS FOR HUBLI UPLAND COTTON.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
Sample No.	Cotton.	Season.	Date of Spinning.	Counts Nominal.	Weight of Sample (lbs.)	WASTE PERCENTAGES.				RING FRAME PARTICULARS.*				VERY TRUE RESULTS.										LISTED YARN STRENGTH (No.)	RELATIVE HUMIDITY. (%)	
						Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss.	Yarn Breakage per 100 spindles per hour.	Front Tension, lb.	Spindle Speed, rpm.	Draft.	Turns per Inch.	Counts Actual.	Strength (lbs.)	Count-Stepping Product.	Counts Actual.	Work of Ring Frame (lb.-in.-hr.)	Count-Work Product.	Evenness Class.	Knots per Yard.	Turns per Inch Actual.			
1021	Hubli Upland..	1930-31	10-4-31	20	10	0.1	10.1	0.7	10.9	10	100	6.67	17.93	20.0	1204	12.5	127.2	2102	3	1.2	17.0	97	61	71	71	71
1021	Hubli Upland..	1930-31	11-4-31	24						32	146	5.68	19.72	21.1	1221	22.8	105.0	2231	4	2.2	18.0	89	62	70	70	70
1021	Hubli Upland..	1930-31	11-4-31	30						57	161	7.10	21.11	20.2	1231	23.5	122.0	2103	5	2.7	22.1	88	66	67	67	67
1333	Hubli Upland..	1931-32	11-5-32	20	10	11.1	10.2	0.6	20.6	11	146	5.93	17.94	20.2	1184	29.1	112.0	2221	4	1.5	17.1	89	67	67	67	67
1333	Hubli Upland..	1931-32	12-5-32	24						72	173	5.63	19.73	21.5	1117	24.5	99.4	2215	4	1.2	19.1	89	68	67	67	67
1743	Hubli Upland..	1932-33	24-4-33	20	10	10.0	11.3	0.5	20.0	63	147	5.93	17.93	19.9	1355	19.9	115.0	2219	4	1.5	17.1	86	61	68	68	68
1743	Hubli Upland..	1932-33	24-4-33	24						61	173	5.94	19.73	21.8	1295	24.1	91.6	2250	5	1.2	19.0	87	62	69	69	69
2230	Hubli Upland..	1933-34	13-4-34	20	10	7.2	10.8	0.5	17.0	26	150	5.57	17.94	19.7	1237	19.8	115.5	2273	4	1.5	17.3	88	67	69	69	69
2230	Hubli Upland..	1933-34	14-4-34	24						161	170	5.94	19.73	21.0	1061	24.1	91.0	2265	5	1.5	18.0	87	60	68	68	68
2703	Hubli Upland..	1934-35	26-6-35	20	10	8.8	15.3	0.0	23.1	47	190	5.31	17.94	19.4	1210	19.5	125.6	2143	4	3.2	17.2	88	70	78	78	78
2703	Hubli Upland..	1934-35	27-6-35	24						65	169	6.22	20.74	22.7	1255	23.2	105.6	2130	5	4.0	20.2	88	72	78	78	78
2703	Hubli Upland..	1935-36	30-4-36	20	10	0.3	8.7	0.4	17.5	16	105	6.05	17.94	20.1	1339	19.6	129.0	2470	4	1.0	17.2	88	69	70	70	70
2703	Hubli Upland..	1935-36	29-4-36	24						11	175	5.51	19.73	21.7	1224	23.7	101.2	2373	4	1.5	18.0	87	69	71	71	71
2703	Hubli Upland	1935-36	29-4-36	30						20	119	6.39	23.26	20.9	1219	29.1	91.6	2162	5	1.2	22.2	80	67	69	69	69

* Diameter of ring frame front roller—17". Diameter of ring—15".

* Diameter of ring frame front roller—1". Diameter of rings—11".

† Total loss is for a small sample weighing 10 lbs.; for bulk sample spun under mill conditions it would be less than shown here.

18.—KAMPALA COTTON.

These samples have been tested by arrangement with the Bombay Millowners' Association, Bombay, who have very kindly agreed to arrange for the supply each season of samples of the first arrivals of the new crop.

Sample No.	Cotton.	Season.
2754	Kampala (African)	1934-35.
3266	Kampala (")	1935-36.

I. SPINNING TESTS.

1. Treatment.—

(a) *Blow-room*.—Hopper bale opener, Horizontal cleaner, Crighton, Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (twice). In 1934-35, the sample was not passed through Horizontal cleaner and was passed through the Scutcher three times; otherwise its treatment was the same as for the 1935-36 sample.

(b) *Card-room*.—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 3.

2. Spinning Master's Report :—

(a) Cotton :—

	KAMPALA.	
	1934-35.	1935-36.
Colour	White to creamy-white; bright.	White to creamy-white; bright.
Cleanliness	Very clean.	Very clean.
Feel.	Good silky.	Smooth and bodied.
Ginning and Neppiness	Well-ginned.	Somewhat knotted and strung.
Seeds		
Card sliver	Clean and silky.	Clean and silky.
Card web	Even and nep-free.	Good.
Weight of 10 flat strips	22.5 grams.	21.8 grams.
Remarks		

(b) Yarn :—

	KAMPALA.	
	1934-35.	1935-36.
Cleanliness	Clean.	Clean.
Evenness	Even.	Even.
Neppiness	Somewhat nappy—small neps.	A little neppy.
Slubbiness		

2 Spinning Test Details and Results.—See Table 18 on page 133.

II.—GRADER'S REPORT FOR KAMPALA COTTON.

		KAMPALA																	
		1934-35.									1935-36.								
Contract valued under
Class
Colour
Staple Length
Staple Strength
Regularity
Value above or below contract rate
Basis
Date of Valuation
Remarks

Table 18.—SPINNING TEST RESULTS FOR KAMPALA COTTON.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
Sample No.	Cotton.	Season.	Date of Spinning.	WASTE PERCENTAGES.				RING FRAME PARTICULARS.*						YARN TEST RESULTS.										TEMPERATURE (°F.).	RELATIVE HUMIDITY (%)	
				Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss.†	Yarn Breakages per 100 spindles per hour.	Front Roller Speed R.P.M.‡	Spindle Speed R.P.M.	Draft.	Turns per inch.	L.E.L.			BALLASTING.			Neps per yard.	Turns per inch Actual.	Spiraling Room.	Testing Room.				
													Counts Actual.	Strength (lbs.).	Count-Strength	Counts Actual.	Work of Ropature (inch-lb.).	Count-Work Product.								
2751	Kampala..	1931-32	27-6-35	20	10	3.1	11.7	0.2	14.6	0	106	9700	5.81	17.98	20.4	110.8	2200	20.4	211.6	4317	3	3.5	17.1	68	70	70
2752	Kampala..	1931-32	1-7-35	30	..	..	..	..	..	3	100	9800	0.41	21.86	28.7	72.4	2078	20.0	120.0	3054	4	4.5	21.1	86	75	82
2753	Kampala..	1931-32	20-6-35	40	..	..	..	..	..	7	141	9800	8.45	25.28	38.8	47.0	1824	38.8	80.0	3453	5	3.8	21.3	88	74	80
2754	Kampala..	1935-36	7-7-36	20	10	2.3	11.1	0.3	13.4	5	201	10300	0.10	17.98	20.3	103.0	2001	20.0	175.6	3017	3	2.5	17.3	87	73	70
2755	Kampala..	1935-36	10-7-36	30	..	..	..	..	..	3	103	10300	6.54	21.86	20.5	66.2	1053	20.4	106.6	3134	4	3.0	21.2	87	72	72
2756	Kampala..	1935-36	11-7-36	40	..	..	..	..	..	5	140	10400	8.89	25.28	40.3	42.4	1700	40.0	74.0	3027	5	3.2	24.7	88	71	68

* Diameter of ring frame front roller— $\frac{1}{2}$ ". Diameter of rings— $\frac{1}{16}$ ".

† It is to be noted that the total loss is for a small sample weighing 10 lbs.; for bulk sample spun under mill conditions it would be less than shown here.

19.—AFRICAN BUSOGA COTTON.

These samples have been tested by arrangement with the Bombay Millowners' Association, Bombay, who have very kindly agreed to arrange for the supply each season of samples of the first arrivals of the new crop.

Sample No.	Cotton.	Season.
1749	African Busoga	1932-33
2755	African Busoga	1934-35
3267	African Busoga	1935-36

I. SPINNING TESTS.

1. Treatment :—

(a) *Blow-room*.—1932-33 Sample :—Porcupine, Crighton (twice), Hopper, Scutcher (3 times).

1934-35 and 1935-36 :—Hopper bale opener, Horizontal cleaner, Crighton, Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (twice). The 1934-35 sample was not passed thro' the Horizontal cleaner and was passed through the Scutcher three times ; otherwise its treatment was the same as for the 1935-36 sample.

(b) *Card-room*.—1932-33 :—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 1. 1934-35 and 1935-36 :—As above but spun from single hank roving on Ring Frame No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) Cotton :—

	AFRICAN BUSOGA.		
	1932-33.	1934-35.	1935-36.
Colour	White to creamy-white.	White to creamy-white; bright.	White to creamy-white; brightish.
Cleanliness	Bright ; very clean.	Clean.	Clean.
Feel	Soft silky.	Silky.	Soft silky.
Ginning and neppiness ..	Well-ginned.	Somewhat knotted.	Slightly knotted in ginning.
Seeds .. .. .	.. .. .	.. .. .	.. .. .
Card sliver	Clean.	Clean.	Clean.
Card web	Good.	Fairly neppy.	Somewhat cloudy and neppy.
Weight of 10 flat strips ..	18.2 grams.	30.3 grams.	24.6 grams.
Remarks .. .. .	.. .. .	Card sliver has a poorish soft and silky feel.	Fibres are irregular in length.

(b) Yarn :—

	AFRICAN BUSOGA.		
	1932-33.	1934-35.	1935-36.
Cleanliness	Clean.	Clean.	Clean.
Evenness	Even.	Even.	Even.
Neppiness	A trifle neppy.	Neppy.	Somewhat neppy.
Slubbiness .. .. .	.. .. .	.. .. .	Occasionally slubby.
Remarks .. .. .	.. .. .	.. .. .	.. .. .

3. Spinning Test Details and Results.—See Table 19 on page 135.

II. GRADER'S REPORT* FOR AFRICAN BUSOGA COTTON.

AFRICAN BUSOGA.									
1932-33.					1934-35.				
Contract valued under	..	..	..	..	F. G. M. G. Branch Hedge Contract No. 2.	Broach July/August 1935.	Broach.	1935-36.	
Class.	..	..	..	..	.. Fully good.	Good.	Fine but little staining.		
Colour	..	..	..	..	.. Creamy-white.	White creamy.	White.		
Staple Length	..	..	..	..	.. 1 1/2".	1 1/2".	1 1/2".		
Staple Strength	..	..	..	..	.. Very good.	Good.	Very good.		
Regularity	..	..	..	..	.. Good.	Regular.	Very regular.		
Value above or below contract rate.	..	..	..	..	.. Rs. 118 on.	Rs. 127 on.	Rs. 120 on.		
Basis	..	..	..	..	.. F. G. M. G. Branch Contract No. 2.	Broach July/August 1935.	Broach July/August 1936, Rs. 240.		
Date of Valuation	..	..	..	..	.. April/May Rs. 182.	..	15-7-36.		
Remarks	..	..	..	..	..	..	..

* Report since 1932-33 is made by the Mill supplying the sample.

Table 19.—SPINNING TEST RESULTS FOR AFRICAN BUSOGA COTTON.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	
Sample No.	Cotton.	Season.	Date of Spinning.	Counts Nominal.	Weight of Sample (lbs.).	WASTE PERCENTAGES.				JUNG FRAM PARTICULARS.*					YARN TEST RESULTS.										TEMPERATURES (°C.).	RELATIVE HUMIDITY (%).	
						Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss.	Yarn Breakages per 100 spindles per hour.	Front Roller Speed R.P.M.	Spindle Speed R.P.M.	Draft.	Turns per inch.	L.E.A.			BALISTIC.			Twines Class.	Keps per yard.	Turns per inch Actual.	Spinning Room.			Testing Room.
															Counts Actual.	Strength (lbs.).	Count-Strain (lb.).	Count-Strain (lb.).	Work out (lb.-in.).	Count-Work Product.							
1740	African Busoga.	1932-33	1-5-33	40	10	4.4	0.3	0.4	5.1	22	141	9700	0.14	25.28	39.1	42.2	1050	39.1	77.6	3934	5	1.8	24.0	83	64	71	
1740	African Busoga.	1932-33	3-5-33	50		..	..	..	..	22	136	10800	11.35	26.90	30.6	20.8	1308	49.8	60.0	2938	5	2.5	23.8	00	87	06
2755	African Busoga.	1934-35	27-6-35	20	10	3.4	14.7	0.4	18.5	16	107	9700	5.93	17.98	29.2	110.2	2108	29.2	209.2	4289	3	8.5	17.1	88	73	78	
2755	African Busoga.	1934-35	28-6-35	30		..	..	..	..	7	184	9700	6.50	21.80	28.8	75.5	2174	29.0	125.4	3719	4	8.0	21.3	88	71	80
2755	African Busoga.	1934-35	28-6-35	40		..	..	..	..	12	143	9800	8.80	26.28	30.6	47.3	1873	40.6	86.4	3100	5	7.5	21.5	88	72	78
3267	African Busoga.	1935-36	8-7-30	20	10	5.6	14.4	0.3	19.4	21	292	10250	5.95	17.98	20.6	102.6	2114	20.4	177.8	3627	3	1.8	17.2	87	73	08	
3267	African Busoga.	1-36	10-7-30	9		..	..	..	..	17	160	10300	6.41	21.80	20.6	70.5	2087	20.7	103.8	3231	4	2.2	20.9	80	72	74
3267	African Busoga.	1-36	9-7-36	4		..	..	..	..	0	140	10100	8.92	25.23	30.6	45.3	1897	30.8	81.2	3292	5	2.8	21.2	87	74	72

* Enter of loss per ton in roller. Diameter of ring—1 1/2". The total loss is for small sample weighing 10 lbs.; for bulk sample spun under mill conditions it would be less than shown here.

20.—JINJA COTTON.

This sample has been tested by arrangement with the Bombay Mill-owners' Association, Bombay, who have very kindly agreed to arrange for the supply each season of samples of the first arrivals of the new crop.

<i>Sample No.</i>	<i>Cotton.</i>	<i>Season.</i>
3268	Jinja (African).	1935-36.

I. SPINNING TESTS.

1. *Treatment* :—

(a) *Blow-room*.—Hopper bale opener, Horizontal cleaner, Crighton (once), Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (twice).

(b) *Card-room*.—Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving on Ring Frame No. 3.

2. *Spinning Master's Report.*

(a) *Cotton* :—

	JINJA (AFRICAN).
	1935-36.
Colour.	White to creamy-white; bright.
Cleanliness.	Fairly clean.
Feel.	Soft smooth.
Ginning and Neppiness.	A good deal knotted in ginning.
Seeds.	..
Card sliver.	Clean, soft and silky.
Card web.	A little neppy and cloudy.
Weight of 10 flat strips.	31.1 grams.
Remarks.	..

(b) *Yarn* :—

	JINJA (AFRICAN).
	1935-36.
Cleanliness.	Clean.
Evenness.	Even.
Neppiness.	Neppy.
Slubbiness.	A little slubby.

3. *Spinning Test Details and Results* :—See Table 20 on page 137.

II.—GRADER'S REPORT FOR JINJA (AFRICAN) COTTON.

JINJA (AFRICAN).	
1935-36.	
Contract valued under.	Breach.
Class.	Fully good to fine.
Colour.	White creamy.
Staple Length.	1 1/4"
Staple strength.	Good.
Regularity.	Regular.
Value above or below Contract rate.	Rs. 110 on.
Rate.	Breach July/August 1936, Rs. 240.
Date of Valuation.	15-7-1936.
Remarks.	..

Table 20.—SPINNING TEST REPORT FOR JINJA (AFRICAN) COTTON.

Sample No.	Cotton.	Season.	Date of Spinning.	Count of Sample Nominal (lbs.).	Weight of Sample (lbs.).	WASTE PERCENTAGES.				RING FRAME PARTICULARS.*						YARN TEST RESULTS.					TEMPERATURE, (°F.).		RELATIVE HUMIDITY (%).			
						Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss.†	Yarn Breakages per 100 spindles per hour.	Front Roller Speed R.P.M.	Spindle Speed R.P.M.	Draft.	Turns Per Inch.	LEA.		BALISTIC.			Neps per yard.	Turns per inch Actual.	Spinning Room.	Testing Room.			
															Strength (lbs.)	Count Strength.	Count Product.	Counts Actual.	W o r k o f (inch-lb.).					Count Work Product.	Ivyness Class.	
3263	Jinja (Uganda).	1932-30	8-7-30	20	10	0.2	17.5	0.4	22.0	21	200	10300	0.07	17.08	20.0	98.0	2037	20.7	172.0	3300	3	3.5	17.1	80	70	70
3264	Jinja (Uganda).	1932-30	8-7-30	30	30	..	..	..	..	0	170	10300	0.58	21.80	20.4	90.0	2005	30.1	108.0	3251	4	4.2	20.0	87	73	74
3265	Jinja (Uganda).	1932-30	9-7-30	40	40	..	..	..	..	10	147	10450	0.07	25.38	40.5	42.6	1725	40.9	79.0	3250	5	4.0	24.1	80	73	72

* Diameter of ring frame front roller—3". Diameter of rings—1 1/2".

† It is to be noted that the total loss is for a small sample weighing 10 lbs.; for bulk sample spun under mill conditions it would be less than shown here.

1.—JAGADIA COTTON.

These samples have been tested by arrangement with the Ahmedabad Millowners' Association, Ahmedabad, who have very kindly agreed to arrange for the supply each season of samples of the first arrivals of the new crop.

Sample No.	Cotton.	Season.
1010	Jagadia	1930-31
1317	Jagadia	1931-32
1550	Jagadia	1932-33

(b) Yarn :— : : : :

		JAGADIA.				
		1930-31.	1931-32.	1932-33.	1933-34.	1935-36.
Cleanliness	.. ..	Clean.	Clean.	Clean.	Almost clean.	Clean.
Evenness	.. ..	Even.	Fairly even.	Fairly even.	Even.	Even.
Neppiness	.. ..	Practically free of nep.	Almost free of nep.	Fairly free of nep.	Almost free of nep.	Almost free of nep.
Stubbiness	.. ..	....	....	....	....	....
Remarks	.. ..	....	....	....	....	....

3. *Spinning Test Details and Results.*—See Table 1 on page 140.

II.—GRADER'S REPORT* FOR JAGADIA COTTON.

—		1930-31.	1931-32.	1932-33.	1933-34.	1935-36.
Contract valued under
Class
Colour
Staple Length
Staple Strength
Regularity
Value above or below contract rate
Basis
Date of Valuation
Remarks

* Report since 1932-33 is made by the mill supplying the sample.

Table 1.—SPINNING TEST RESULTS FOR JAGADIA COTTON.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
Sample No.	Cotton.	Season.	Date of Spinning.	Weight of Sample (lbs.)		WASTE PERCENTAGES.					RING FRAME PARTICULARS.*					YARN TEST RESULTS.								TEMPERATURE ABOVE HUMIDITY (°F.).	RELATIVE HUMIDITY (%)	
				Counts Nominal.		Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss.†	Yarn Breakages per 100 spindles per hour.	Front Roller Speed H.P.M.	Spindle Speed H.P.M.	Dm. in.	Turns per inch.	Counts Actual.	Strength (lbs.).	Count Strength Product.	Counts Actual.	Work of Rupture (inch-lb.).	Count Work Product.	Evenness Class.	Neps per yard.	Turns per inch Actual.			Spinning Room.
1010	Jagadia.	1930-31	25-3-31	20	8	7.4	8.6	6.5	15.8	25	105	0050	6.93	17.08	20.5	75.0	1550.	26.1	113.2	2300	3	1.7	17.1	80	60	09
1010	Jagadia.	1930-31	26-3-31	30A	..	..	..	..	..	64	150	0100	7.09	21.86	30.1	42.3	1273	30.7	76.4	2345	4	1.5	21.1	86	68	05
1010	Jagadia.	1930-31	25-3-31	30B	..	..	..	..	..	29	150	0000	7.29	23.11	30.2	45.0	1377	30.4	78.1	2381	4	2.0	22.0	86	69	07
1317	Jagadia.	1931-32	3-5-32	24	10	8.8	8.4	6.6	10.0	40	178	0050	6.50	19.73	24.7	52.0	1284	24.4	64.0	2201	4	1.2	19.3	88	60	05
1317	Jagadia.	1931-32	4-5-32	30B	..	..	..	..	..	53	152	0700	6.86	23.11	30.1	40.8	1228	30.2	78.8	2380	5	2.2	22.2	90	64	00
1779	Jagadia.	1932-33	24-5-33	24	10	0.4	6.3	0.6	18.3	32	179	0700	5.33	19.73	23.0	65.7	1531	24.0	101.0	2496	4	1.5	18.0	89	69	03
1779	Jagadia.	1932-33	24-5-33	30A	..	..	..	..	..	09	155	0400	6.59	21.86	20.1	47.8	1391	20.0	86.1	2500	5	2.0	21.1	90	68	08
1779	Jagadia.	1932-33	25-5-33	30B	..	..	..	..	..	83	160	0700	6.70	23.11	29.3	18.1	1418	29.5	86.1	2549	5	2.5	22.3	90	60	70
2375	Jagadia.	1933-34	10-7-34	20	10	10.0	11.2	0.5	20.5	30	104	0300	5.93	17.08	20.3	62.6	1271	19.8	112.6	2229	3	1.5	17.1	87	72	76
2375	Jagadia.	1933-34	11-7-34	24A	..	..	..	..	..	86	170	0150	6.10	10.73	24.0	49.4	1186	24.0	91.4	2104	4	1.8	10.0	80	74	78
2375	Jagadia.	1933-34	11-7-34	24B	..	..	..	..	..	73	177	0000	6.10	20.71	24.1	51.3	1236	23.6	94.8	2237	4	1.5	20.0	86	76	75
3164	Jagadia.	1935-36	5-5-36	26	10	5.3	8.1	0.3	13.3	10	103	0050	5.83	17.08	19.0	71.4	1481	26.0	113.6	2310	3	1.0	17.5	88	69	70
3164	Jagadia.	1935-36	1-5-36	24	..	..	..	..	..	18	171	0550	5.33	10.73	23.3	61.3	1428	23.5	101.8	2103	4	1.2	19.1	88	69	70
3164	Jagadia.	1935-36	4-5-36	36	..	..	..	..	..	20	114	8850	6.45	21.86	29.0	41.2	1220	20.8	80.6	2402	4	1.0	20.8	87	68	70

* Diameter of ring frame front roller—1½". Diameter of rings—1½".

† It is to be noted that the total loss is for a small sample weighing 10 lbs. or thereabout; for bulk sample spun under mill conditions it would be less than shown here.

2.—BAWLA COTTON.

These samples have been tested by arrangement with the Ahmedabad Millowners' Association, Ahmedabad, who have very kindly agreed to arrange for the supply each season of samples of the first arrivals of the new crop.

Sample No.	Cotton	Season.	Sample No.	Cotton.	Season.
1011	Bawla ..	1930-31	2376	Bawla ..	1933-34

I.—SPINNING TESTS.

1. *Treatment.*—These samples were passed through the Porcupine, Crighton (twice), Hopper, Scutcher (3. times), Card, Drawing (2 heads), Slubber, Inter, Rover and spun from single hank roving in Ring Frame No. 1.

2. *Spinning Master's Report* —

(a) *Cotton* :—

	BAWLA.	
	1930-31.	1933-34.
Colour	White; bright.	White to creamy white; bright.
Cleanliness	A trifle leafy.	A little leafy with occasional stains.
Feel	Good.	Good smooth.
Ginning and Neppiness	Very well-ginned.	Well-ginned.
Seeds	1% unginned.	..
Card sliver	Clean.	Almost clean.
Card web	Very good.	Full.
Weight of 10 flat strips	9.9 grams.	19.2 grams.
Remarks .. .. .	..	..

(b) *Yarn* :—

	BAWLA.	
	1930-31.	1933-34.
Cleanliness	Clean.	A little leafy.
Evenness	Even	Even in 20s only.
Neppiness	Almost free of nep.	A little neppy.
Slubbiness .. .. .	..	..

3. *Spinning Test Details and Results* :—See Table 2 on page 142.

II.—GRADERS' REPORT FOR BAWLA COTTON.

		BAWLA.									
		1930-31.					1933-34.*				
Contract valued under	Broach.	..	..	..	..
Class	Fine.	..	..	..	..
Colour	White.	..	..	..	..
Staple Length	15/16 inch.	..	..	..	..
Staple Strength	Fair.	..	..	..	..
Regularity	Fair.	..	..	..	..
Value above or below contract rate	Rs. 22 on.	..	..	..	..
Basis	Rs. 212.	..	..	..	..
Date of Valuation	11-6-34.	..	..	..	..
Remarks

* Report for 1933-34 is made by the mill supplying the sample.

Table 2.—SPINNING TEST RESULTS FOR BAWLA COTTON.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
Sample No.	Cotton.	Season.	Date of Spinning.	WASTE PERCENTAGES.				RING FRAME PARTICULARS. *						YARN TEST RESULTS.								TEMPER. AFTER SPINNING (°F.).	RELATIVE HUMIDITY (%).			
				Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss. †	Yarn Breakages per 100 spindles per hour.	Front Roller Speed R.P.M.	Spindle Speed R.P.M.	Draft.	Turns per inch.	LRA.			BALLISTIC.			Turns per inch Actual.	Spinning Room.						
													Counts Actual.	Strength (lbs.)	Count-Strength	Counts Actual.	Work of Muplun (inch-lb.)	Count-Work								
1011	Rawls	1930-31	26-3-31	8	15.7	23	182	8050	6.41	17.93	20.1	54.8	1101	10.8	103.8	2055	3	1.2	10.0	85	68	67	60	77	74	
1011	Rawls	1930-31	27-3-31	9	18.8	10	102	5500	6.33	20.74	24.7	42.3	1045	24.8	85.0	2108	4	1.7	20.1	85	67	60	77	74		
2376	Rawls	1933-34	11-7-34	10	18.8	10	195	5500	6.00	17.93	20.3	83.3	1001	10.8	136.4	2701	3	2.5	17.4	80	76	77	74			
2376	Rawls	1933-34	12-7-34	10	18.8	7	160	5500	6.23	21.80	29.4	50.5	1485	20.2	89.0	2500	5	2.8	21.1	80	76	77	74			
2376	Rawls	1933-34	12-7-34	10	18.8	24	151	5500	7.21	23.20	33.5	39.2	1313	33.1	70.8	2542	0	2.6	23.3	80	77	74	74			

* Diameter of ring frame front roller: 1". Diameter of rings: 1-1/4".

† It is to be noted that the total loss is for a small sample weighing 10 lbs. or thereabouts; for bulk sample spun under mill conditions it would be less than shown here.

3.—KADI COTTON

These samples have been tested by arrangement with the Ahmedabad Millowners' Association, Ahmedabad, who have very kindly agreed to arrange for the supply each season of samples of the first arrivals of the new crop.

Sample No.	Cotton.	Season.
1012	Kadi	1930-31
1318	Kadi	1931-32
2377	Kadi	1933-34
3165	Kadi	1935-36

I.—SPINNING TESTS.

1. Treatment :—

(a) *Blow room.*—Upto 1933-34 :—Porcupine, Crighton (twice), Hopper Scutcher (3 times).

1935-36 :—Hopper bale opener, Horizontal cleaner, Crighton (once) Gridded dust trunks, Cage exhaust, Hopper feeder, Scutcher (3 times)

(b) *Card room.*—Upto 1933-34 :—Card, Drawing (2 heads), Sluber, Inter Rover and spun from single hank roving on Ring Frame No. 1.

1935-36 :—As above but spun from single hank roving on Ring Fram No. 3 which is fitted with tape drive arrangement for spindles, while Ring Frame No. 1 possesses a band drive arrangement.

2. Spinning Master's Report :—

(a) Cotton :—

	Kadi.			
	1930-31.	1931-32.	1933-34.	1935-36.
Colour	White; bright	White; bright	Creamy-white	White to creamy-white brightish.
Cleanliness	Leafy	A trifle stained; fairly leafy.	Very leafy with occasional stains.	Leafy.
Feel	Good	Good soft	Good	Good.
Ginning and Neppiness .. .	Very well-ginned	Well-ginned	Well-ginned	Well-ginned.
Seeds	1% unginned	....	....	....
Card Sliver	Clean	Almost clean	Almost clean	Almost clean.
Card Web	Very good	Even and nep-free.	Full	Even and nep-free.
Weight of 10 flat strips .. .	....	13.0 grams	20.7 grams	15.3 grams.
Remarks .. .. .	....	....	....	....

(b) Yarn :—

	Kadi:			
	1930-31.	1931-32.	1933-34.	1935-36
Cleanliness	Clean	Clean	Almost clean	Almost clean
Evenness	Even	Fairly-even	Even in the two lower counts.	Even.
Neppiness	Almost free of nep.	Practically free of nep.	Almost free of nep.	Nep-free.
Slubbiness .. .. .	....	....	A trifle slubby.	....

3. *Spinning Test Details and Results* :—See Table 3 on page 144.

II—GRADER'S REPORT FOR KADI COTTON.

Kadi.									
1930-31.			1931-32.			1933-34.*			1935-36*
Contract valued under			Broach/Dholera			Broach			Broach.
Class			Fine			Fine			Fine.
Colour			White			White			White.
Staple Length			11/10 inch			15/16 inch			15/16 inch.
Staple Strength			Fair			Fair			Fair.
Regularity			Fair			Fair			Fair.
Value above or below contract rat			Rs. 65.70 on			Rs. 13 on			Rs. 7-8 on.
Basis			Rs. 205			Rs. 170			Rs. 200.
Date of Valuation			26-3-31			5-5-32			1-4-36.
Remarks									

* Reports for 1933-34 and 1935-36 are made by the mill supplying the sample.

Table 3.—SPINNING TEST RESULTS FOR KADI COTTON.

Sample No.	Cotton.	Season.	Date of Spinning.	Counts Nominal.	Weight of Sample (lbs.)	WASTE PERCENTAGES.				RING SPINNING PARTICULARS.*						YARN TEST RESULTS.										TEMPERATURE ABOVE HUMIDITY(%)	RELATIVE HUMIDITY(%)
						Blow Room Loss.	Card Room Loss.	Spinning Loss.	Total Loss.†	Karn Breakings per 100 spindles per hour.	Front Roller Speed R.P.M.	Spindle Speed R.P.M.	Draft.	Turns per inch.	Lvs.		DYEING.			Evenness Class.	Steps per yard.	Turns per inch Actual.	Spinning Room.	Spinning Room.			
															Counts Actual.	Strength (lbs.)	Count-Strangth	Counts Actual.	Works of (inch-lb.)						Count-Work		
1012	Kadi	1930-31	26-3-31	20	8	10.2	7.0	0.9	18.1	57	182	8050	6.41	17.08	10.8	68.8	1104	10.8	105.8	2005	3	1.0	17.0	85	86	85	86
1012	Kadi	1930-31	27-3-31	24	..	..	..	..	..	56	182	8500	6.54	20.74	24.3	42.6	1035	24.1	85.4	2038	4	1.5	10.8	85	87	85	87
1318	Kadi	1931-32	4-5-32	29	10	10.5	7.0	0.7	18.1	105	104	9000	5.00	17.08	10.0	50.6	1180	20.3	105.1	2140	1	1.0	17.5	90	90	90	90
1318	Kadi	1931-32	8-5-32	24	..	..	..	..	..	98	108	9050	6.54	20.74	23.2	50.8	1170	23.4	93.9	2176	5	1.5	20.3	90	93	90	93
2377	Kadi	1933-34	11-7-34	20	5	14.2	10.8	0.7	21.0	56	103	9500	6.16	17.68	19.7	68.3	1316	10.9	118.6	2300	3	1.2	17.3	80	75	80	75
2377	Kadi	1933-34	12-7-34	24	..	..	..	..	..	41	178	9050	5.43	19.73	23.7	55.5	1315	24.1	85.0	2290	1	1.5	18.0	86	74	86	74
2377	Kadi	1933-34	12-7-34	30	..	..	..	..	..	50	131	9500	0.87	23.11	20.0	89.5	1140	29.6	75.4	2232	5	2.0	21.9	86	77	86	77
2165	Kadi	1935-36	5-5-36	20	10	12.5	8.2	0.5	20.1	29	104	9700	5.83	17.08	10.6	68.5	1313	10.8	110.8	2313	3	0.5	17.5	87	90	87	90
3165	Kadi	1935-36	6-5-36	24	..	..	..	..	..	41	174	9700	0.07	10.73	21.1	48.2	1102	23.2	97.4	2200	4	0.8	18.7	88	97	88	97

* Diameter of ring frame roller. † Diameter of ring. ‡ It is to be noted that the total loss is for a small sample weighing 10 lbs. or less; for bulk sample spun under mill conditions it would be less than shown here.